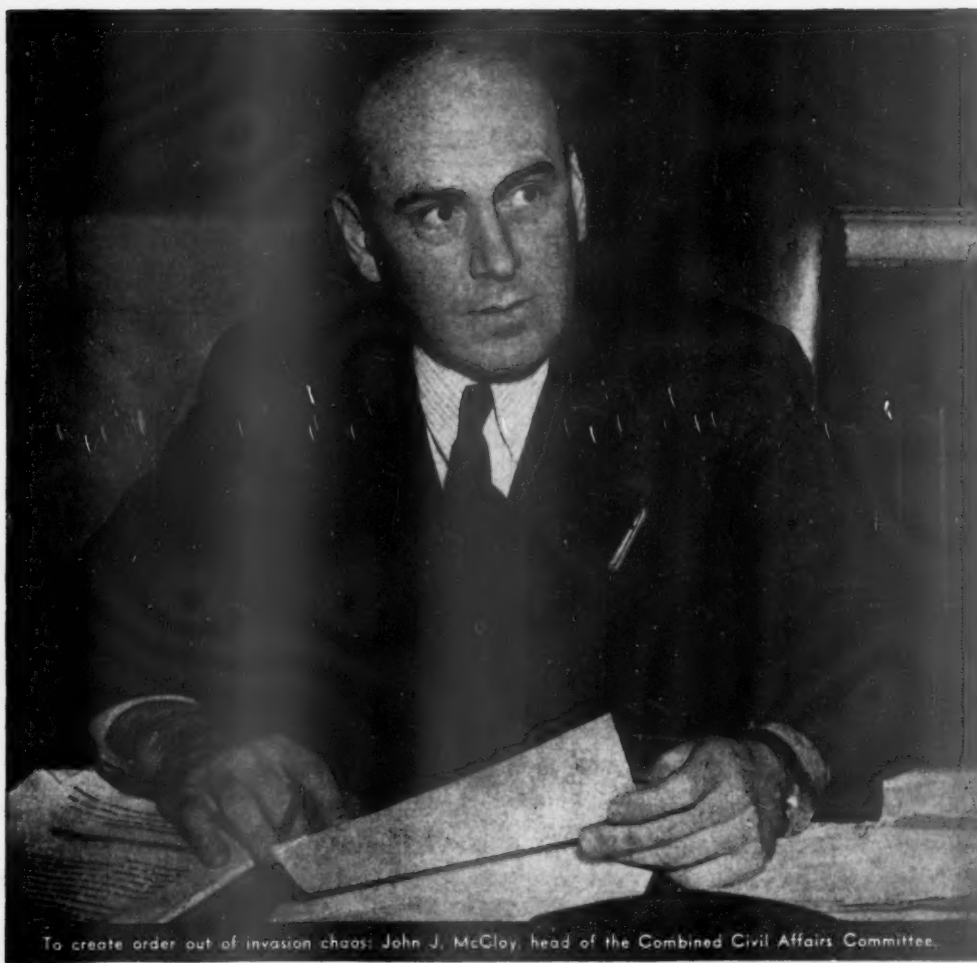


BUSINESS WEEK

WEEK
AGO



YEAR
AGO



To create order out of invasion chaos: John J. McCloy, head of the Combined Civil Affairs Committee.

START
OF WAR
1939

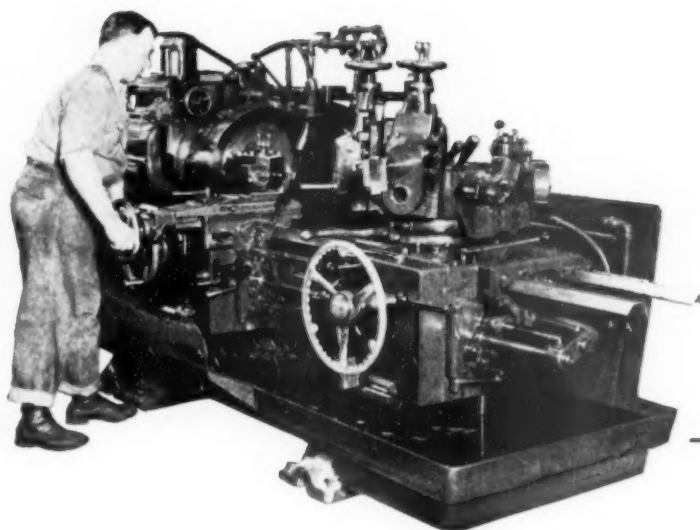


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One reason France fell and America did not



FRANCE had let its machines grow old, its machine tool industry wither—while Germany increased machine tool production and modernized its plants. Then, with war on the horizon, France ordered machine tools in a panic—by noon of the day war was declared in 1939 Warner & Swasey had orders from France that represented many a full year's production for us. But it was too late—with old tools and not enough of them, French war production was a trickle, and France was overwhelmed.

Those frantic orders from France were America's warning and the American machine tool industry on its own initiative and with its own money began to

get America ready for war. Warner & Swasey built three plant additions and stepped up production of turret lathes to 10 times the pre-war average.

Without machine tools, no war production is possible. But because the American machine tool industry spent its own money in 1939, 1940 and 1941, to build enough and in time, this country's war production in three years passed that of Germany and Japan combined, in spite of their 10-year and 20-year head starts under dictator control. Remember that fact when anyone tells you that government ownership is more efficient than private ownership under a democracy.



In war or peace
B.F. Goodrich
FIRST IN RUBBER



So cold they need an antifreeze for rubber


A typical example of B. F. Goodrich product development

IT WAS 30 below zero at the Alaskan air base. Workmen tried to unroll sheets of rubber tank packing only to have them shatter like glass into thousands of pieces. The rubber was for sealing joints in high-octane gasoline storage tanks. But it couldn't stand the sub-zero cold. The tank manufacturer had to get the *right* kind of rubber — fast. He called B. F. Goodrich and told their engineers what he needed; a certain size and thickness, resistance to high-octane gasoline, flexibility at 40 below zero. The material

had to be developed, manufactured and shipped in 4 days.

B. F. Goodrich engineers had already developed a synthetic rubber that resists gasoline and oil. They went to work in their cold room where they can produce temperatures as low as 75 below zero. Working night and day they developed a new compound of synthetic rubber — one containing a chemical that acted like an antifreeze and kept the rubber flexible at 40 below. Finished sheets of the new cold-resistant, oil-resistant material were shipped just 3½ days after the call for help was

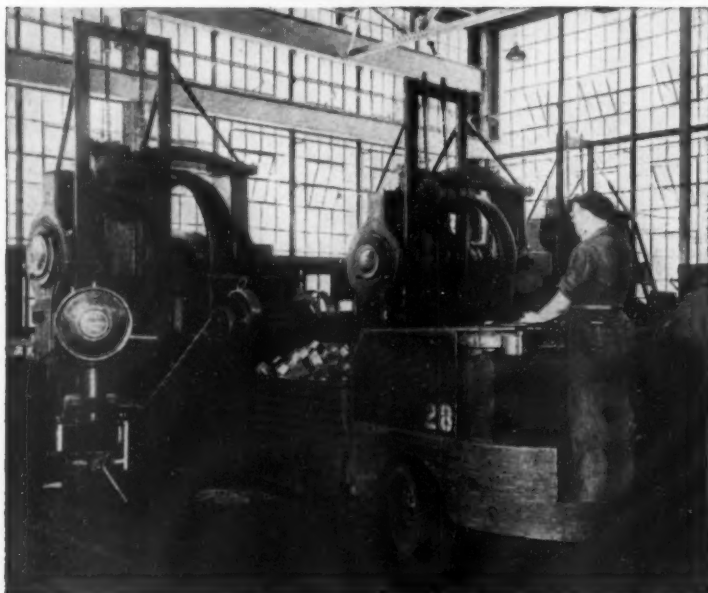
received. In Alaska they were unrolled easily in sub-zero weather and installed in the tanks where they worked perfectly.

B. F. Goodrich research is applied to old as well as new products. If you're a user of industrial rubber goods, don't decide that any product is the best to be had until you've found out what B. F. Goodrich may have done in recent months to improve it. *The B. F. Goodrich Company, Industrial Products Division, Akron, O.* 

B.F. Goodrich

RUBBER and SYNTHETIC products

24 hours a day... EVERY DAY



This truck handles billets in units up to 5 tons in skid boxes. Its use saves much time and manpower in war production. It is part of a well thought out material handling system. Articles describing modern handling methods appear regularly in STORAGE BATTERY POWER. Write for sample copy if you do not already receive it.

Illustrated above is a material-handling job for which trucks must be kept on duty 24 hours a day, every working day. It is the kind of job in which battery industrial trucks excel because of their dependability and economy.

With batteries exchanged two or three times a day, the truck is kept continuously supplied with power. While one battery is being charged, another operates the truck.

The truck starts instantly, accelerates smoothly; operates quietly; gives off no fumes; consumes no power during stops. Thus, it makes efficient use of power, and the current used for charging its batteries is the lowest-cost power available. Its electric-motor drives have a minimum of wearing parts and are inherently simple and trouble-free.

A battery industrial truck is most dependable and most economical when powered by Edison Alkaline Batteries. With steel cell construction, a solution that is a natural preservative of steel, and a fool-proof principle of operation, they are the most durable, longest lived, and most trouble-free of all types of batteries. Edison Storage Battery Division of Thomas A. Edison, Inc., West Orange, New Jersey.

"WHY WE OLD TIMERS SPECIFY EDISONS"

A Typical Example of
Alkaline Battery Dependability

"I have been reading some interesting stories about Edison Alkaline Batteries," writes a general foreman of maintenance of a mid-west air depot, "and I believe I can top them all. In 1917, two industrial trucks and four Edison batteries were delivered to this field. They were in continuous operation until 1927, at which time they were no longer needed.

"The four batteries were discharged and placed in a warehouse with the trucks, where they remained for ten years. In 1937, the trucks and batteries were brought out. The batteries were given a good cleaning and had their solution changed. Then they were returned to service in the trucks, where they did a swell job until the spring of 1943.

"The long life of those four batteries is one of the reasons why we old-timers specify Edisons for our new trucks."



Edison
ALKALINE BATTERIES

BUSINESS WEEK

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Cutback Preparations

WPB is finally making specific preparations for a cut in the war production program. At the same time that the special artillery schedule is being expanded (page 9), all signs are pointing to a reduction in general military requirements around the third quarter of this year—a cut big enough to free substantial quantities of manpower, materials, and plant capacity for civilian production.

On all but a few items, the fighting forces now have, or soon will have, all the original issue they need.

New production is intended more and more as replacement. Unless combat losses run higher than the liberal margins allowed by the Army and Navy, these replacement demands will be much lower than the schedules that were set up at the time the military was filling its arsenal.

Planes Levelled Off

Aircraft is one of the key factors in the production situation, and for the first time since the start of the war, a new plane program (W-11), now being completed, establishes lower schedules than the one it replaces. Whereas W-10 planned increases beyond present levels, W-11 calls for continued production at about present levels in terms of airframe weight.

20% in Six Months?

Beyond that, production officials are now hinting at a cutback that would bring aircraft output below present levels—perhaps even as much as 20% below those levels—about five or six months from now.

Repercussions back down the production chain would be tremendous. For instance, a 20% cut in plane output would free as much manufacturing capacity for fractional horsepower motors—now particularly tight and a “must” for provision of washing machines and other appliances—as was available before the war. And it would take all of the squeeze out of the bearings situation.

With a Bang

The hitch is that WPB cannot start cutting down on components and sub-assemblies in advance of the actual decision to reduce plane output. It can't risk a change in the military outlook or

a sudden rise in combat losses. Consequently, when the cutback comes it will come with a bang.

Cuts Now

Meanwhile, current developments underline the situation and give an air of immediacy to what is going on.

Army's decision to stop production of the Douglas A-20 (Havoc), coming on top of the cancellation of Navy's contract with Brewster (page 31), has given plane manufacturers a new manpower worry. Although the Army expects Douglas to get going at once on another model, temporary layoff of workers is inevitable. The change-over will take from four to six significant months while employment at the Douglas plants now building the A-20 and that of subcontractors drop by at least 3,000, perhaps by as much as 10,000.

Aircraft manufacturers fear that workers will panic, start moving into lines that seem to offer more security. As an antidote the Army will issue a reassuring statement, may let Douglas publicize its new model, which so far has been kept a tight secret.

Other signs being closely watched come with the announcement that Bell Aircraft Corp.'s production of its new high-altitude fighter is being leveled off sooner and at a lower peak than had been planned, though still due for a rise until late summer or early fall; also with the news that Ford's Willow Run plant is enough ahead of schedule on B-24's to close down both on Memorial Day and on the preceding day.

Auto Plan Coming

This week WPB officials, getting set to make up for lost time by quick action, told the automotive parts manufacturers that, by July, they hoped to have a detailed plan for partial resumption of passenger car production (BW-Mar.25'44,p5). At the same time, pressure within WPB for establishment of a production planning and adjustment committee to steer reconversion has suddenly revived.

Legal Question

Legal experts are studying WPB's authority to continue its regulations after the squeeze on manpower and materials is past. They think the war

powers acts will cover the situation then as now. Businessmen are not so sure. Many want specific legislation to continue the moratorium on antitrust law prosecution for cooperative action under WPB's direction.

No Corporate Tax Change

Congressmen with an eye on the coming elections drew a deep breath of relief this week as they completed action on the individual income tax simplification bill and sent it along to the White House.

Although a few congressmen want to move on to corporate taxes at once, most of them would like to leave simplification alone for a while. The harmony that prevailed while the simplification bill for individuals was being drafted hasn't deceived anyone into thinking that a bill dealing with corporate taxes would go through as easily.

The chances are that no serious attempt to revise the corporate tax structure will get under way until the new Congress meets in 1945.

Eleventh Hour Price Strategy

Increasingly, prospects favor extension of the price control act beyond its June 30 expiration date with few—if any—changes. Congressmen have less than a month before the Republican National Convention begins (June 26) to produce a bill which President Roosevelt won't veto.

The large farm organizations have dropped the fight for a flat ban on consumer subsidies but have replaced it with demands for amendments which would force higher cotton textile ceilings (BW-May13'44,p45) and make sundry changes in OPA's administrative proceedings. Other special interest groups—petroleum, livestock, landlords—are putting on the heat, and the chances are good that vote swapping among these groups will begin on a grand scale once the bill reaches the House floor.

The result will be an overloaded bill, one that Roosevelt can veto—and make stick. Crowded for time, Congress will then be forced into a simple continuation of the present law.

OPA Moves to Hold Powers

Knowing that OPA is most vulnerable to criticism of its legal proceedings (page 94), price officials are quietly working

GARDEN-FRESH FLAVOR...

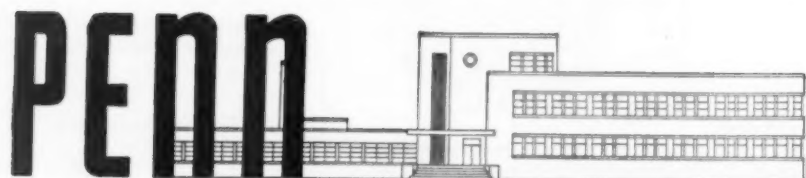
**CAPTURED AND HELD
FOR POST-WAR TABLES**



The vital role of Refrigeration in our war-time drama is a curtain-raiser for the vastly expanded part which controlled cold will play in the post-war world. Far wider enjoyment of frozen foods, *with a much greater variety and selection of such foods*, will be one of many important results of this expansion.

New and improved refrigerating equipment to freeze, warehouse and transport foods...to enable retail display and storage in the home...waits only for the release of manpower and materials. For such equipment Penn will supply controls to establish and hold the temperatures required.

Embodied in these controls will be the efficiency and dependability for which Penn has long held an outstanding reputation in the field of commercial refrigeration. To the makers of refrigeration equipment, and to all manufacturers whose present or post-war product needs automatic control, Penn offers thoroughly experienced engineering, and precision production facilities. Inquiry involves no obligation; write us now. *Penn Electric Switch Co., Gosben, Indiana.*



AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

Members of the Senate and House Banking & Currency committees in an effort to find compromises which will meet congressional demands for drastic curbs on OPA's authority.

Two likely spots for compromise: (1) the present OPA interpretation of the law which holds that a businessman who does not file a protest against a price regulation within 60 days after it is issued loses his right of appeal, and (2) the present machinery—or lack of it—through which business firms laboriously appeal from regulations.

OPA is receptive to Sen. Robert A. Taft's suggestion that Price Administrator Chester Bowles appoint a special board of review to handle appeals.

Buffalo Stalemate Ends

Dispute between 28 independent meat packers in Buffalo and OPA over price ceilings ended Monday when most of the packers began buying on the local livestock market. The meat shortage in the city, caused by a three-month closing of the packing houses, is rapidly disappearing.

Some die-hard packers insist their quarrel with OPA has not been resolved, but the majority declare they are testing whether OPA's offer to shift Buffalo from Zone 7 to Zone 8 (giving them 4¢ per lb. more on beef), and transportation subsidies of 80¢ per cwt. on shipped-in cattle will permit profitable operation (BW—May 20'44, p. 83).

Setting Amortization Rules

John M. Hancock, who heads the Joint Contract Termination Board, has taken over the job of getting the procurement agencies to agree with each other and with WPB on a set of rules for issuing certificates of non-necessity—the permits that contractors will need to accelerate amortization on plants built for war production but no longer needed.

The services, after trying for more than a year to get a working agreement for issuing certificates, took their troubles to Economic Stabilization Director James F. Byrnes, who promptly tossed the job into Hancock's lap.

No Plants for Argentina

Argentina will be lucky if it gets a pencil eraser, much less a synthetic rubber plant, from the United States.

This was the official reaction to a paid

newspaper advertisement in which the Argentine embassy invited bids for installation of a synthetic plant.

Under Secretary of State Edward R. Stettinius' statement that the equipment and technique are part of our war program—and therefore not available to Argentina—is, of course, binding upon any U. S. company or individual.

NWLB Finds a Way Out

The National War Labor Board has made up its mind that the only way out of the foremen's dilemma (BW—May 20'44, p. 102) is to dictate the terms and conditions of their employment.

For that reason NWLB is setting up a panel to determine just how far it can go in settling disputes involving foremen without running afoul of the Wagner act. (The National Labor Relations Board has decided that the act doesn't require employers to recognize foremen's unions, but that foremen may not be discharged for union activity.)

Possible solution would have NWLB incorporate its decision in an order without asking the parties to sign a formal contract which might serve as a precedent after the war.

Accord Near on NLRB Ballot Policy

To save its maintenance-of-union-membership policy, the National War Labor Board probably will be forced to support the National Labor Relations Board's proposal to permit employers to petition for collective bargaining elections within five days after a dispute has been certified to NWLB.

NLRB's proposed new rule was inspired, on the admission of Gerard Reilly, board member, by his fear that NWLB has been violating the Wagner act. Operating under executive orders to settle wartime disputes, NWLB has shown little patience with employers who have tried to prevent it from acting in a specific situation by contending that the union no longer represents a majority of the employees affected.

This approach was taken by Sewell Avery, Montgomery Ward board chairman, in refusing to extend an expired contract with the United Retail, Wholesale & Department Store Employees Union. NWLB has noticed a tendency among other

Elastic Crop Plans

Three sets of agricultural production plans for 1945 are being worked up by the War Food Administration.

They will show the production needed in the event that (1) Europe is out of the war but Asia is still in the war during the last half of 1945; (2) both Europe and Asia are out of the war; and (3) the war is still going full blast in both Europe and Asia.

All three plans will be a composite of production capabilities, physical requirements for agricultural products here and abroad, and economic considerations.

Plan No. 1 would continue production as is, but with some increase in cotton acreage; No. 2 would sharply reduce the vegetable oilseed crops; No. 3 would increase all direct food crops.

Cable-Radio Merger Favored

Study by the Senate Interstate Commerce Committee of the postwar international communications picture, and of the proposal for a merger of the American cable and radio communications companies, has brought President

employers to pick up Avery's line.

In the Montgomery Ward case, NWLB, recognizing Avery's prowess as a last-ditch fighter, deviated from its practice of extending expired contracts pending negotiation of a new one and, instead, ordered the contract extended pending an election to determine the union's status. But Reilly had insisted, he disclosed this week, that the union agree to refrain from invoking the maintenance-of-membership clause of the contract during the period of government seizure of Montgomery Ward's property, pending the election. He questioned the legality of a maintenance-of-membership order imposed on an employer who has challenged the union's majority status. Conceivably, in Reilly's opinion, an employee discharged by action of a union that actually did not represent a majority could charge the employer with violating the Wagner act.

It is this line of reasoning that is expected to bring NWLB into line behind NLRB's proposed rule.



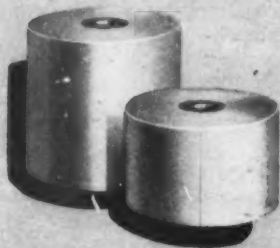
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Burroughs

SUPPLIES FOR
BUSINESS MACHINES

BURROUGHS ADDING MACHINE COMPANY

Roosevelt and Sen. Burton K. Wheeler closer than they have been since the Supreme Court fight.

Following Wheeler's recent call at the White House, Judge Samuel I. Rosenman, the President's special counsel, has been conferring with the Senate committee chairman.

A special message from Roosevelt advocating the postwar merger is expected later. The merger plan would fuse the four major U. S. cable companies and two large radiotelegraph systems together with three smaller ones into a single entity like British Cable & Wireless.

All government agencies concerned are in favor of unification. Because spadework on the merger and congressional hearings will take several months, there's no chance that Congress will act this year.

Capital Gains (and Losses)

The Senate probably won't act until next fall on the bill passed by the House this week abolishing preferential land grant freight rates to the government (BW—Mar. 25 '44, p. 19). The roads expect some opposition in the Senate, won't push for an early decision.

June 1 is the deadline when war contractors must file reports on their 1943 business with renegotiation authorities. Full penalties for failure to file probably won't be assessed against innocent offenders, but renegotiation boards have no power to grant extensions.

Safeway Stores may involve itself in a legal tangle with OPA as a result of its introduction of a new and improved "dated" loaf of bread, priced at 9¢ (1¢ or more higher than the company's regular lines), into the Washington (D. C.) market, right under the nose of national OPA headquarters last week.

WPB claims its sundry remedies are increasing the supply of low-cost clothing and of low-priced textiles generally but, on most items, can't prove it. The Bureau of the Budget has refused to approve forms on which manufacturers would report back actual production of finished goods.

—Business Week's
Washington Bureau

THE COVER

To 49-year-old John J. McCloy, little-known Assistant Secretary of War, goes an important invasion job—patching and rebuilding the human and political damage in the wake of the Allied war machine (page 19). As chairman of the new Combined Civil Affairs Committee, the former Wall Street lawyer will help blueprint administrative policies for the Combined Chiefs of Staff.



Wherever rails run

THE railroad industry uses pressure gauges—a vast number of Ashcroft Gauges—in repair shops, on locomotives, on steam, water and compressed air lines.

The crude early locomotives, making their first runs on the newly built transcontinental railroads, depended on Ashcroft accuracy. The latest streamliners have found nothing better than Ashcroft Gauges for their work.

Just as a modern engine embodies the latest thought and knowledge in its materials and design, Ashcroft Gauges have been improved for even greater strength in service and more enduring accuracy.

Wherever pressures are used in industry or transportation—on land, in and under the sea, through the air—Ashcroft Gauges are chosen with complete confidence that they will perform accurately and for countless years.

This has been true for nearly a century. Yet the gauges we produce today are better, finer gauges than any we have made in our long history.



Whenever you need pressure gauges, specify "Ashcroft." There are gauges exactly suited to your requirements—or we will create them.

Stocked and sold by leading Distributors everywhere... When you order gauges, insist on ASHCROFT... Write for booklet.



ASHCROFT

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THE OUTLOOK

BUSINESS WEEK

MAY 27, 1944



Heavy artillery production schedules are being doubled again—after being multiplied many times in recent months. This big gun program is the dominant new factor in war output.

We blew our way through the Nazi's Cassino line. We will blast Hitler's Atlantic wall—coincidentally rooting out most of his bedeviling land mines—with the force of our high explosives.

Earlier, our artillery's capacity was somewhat the story of sending a boy to do a man's work. We didn't have the right kind of fire power.

Field pieces from 37 mm. to 105 mm. were outranged by the Germans, and their projectiles were short on explosive force. Aerial bombs, though leveling surface obstacles with their terrific concussion, lacked penetration. **Now we are using the armor-piercing shells of the heavy guns (155 mm. to 240 mm.) to reduce the concrete and iron fortifications.**

Until this latest increase in the Army's heavy artillery program, industry at large did not feel the direct effect of the stepup. Government arsenals had the capacity for the job. **Now new plant will be needed, and quickly.**

Indirect effects have been felt for some time, of course. The arsenals recalled laid-off workers. Demand for brass, to be used in big shell cases, has been skyrocketing since early March. Projectiles and the guns themselves have jumped steel demand to the point where ability to meet third-quarter schedules is becoming a matter of grave doubt. The steep decline in machine tools has been reversed dramatically (BW—May 10 '44, p. 16).

On top of everything else, there must be spare barrels. Heavy fire quickly ruins the rifling, and the barrels aren't made for relining.

Every indication points to tightness in steel becoming more critical. The creeping decline in output during the past month emphasizes this.

The rate of steel ingot production this week fell nearly a full percentage point and now stands at 98.4% of capacity. While still very high, **that means weekly output nearly 30,000 tons below the recent peak.**

WPB's chief, Donald Nelson, fears third-quarter steel supplies will fall 500,000 tons short of earlier estimates. This, he warns, means further scaling down of allocations for the quarter.

The battle over the farm implement program (page 16) isn't simplified by the steel situation. And can manufacturers, seeking 800,000 tons of tinplate for the third quarter, have been told they must get by on 634,000.

In addition, midsummer heat will tend to increase absenteeism.

Use of copper in this country probably will break all records in the second quarter—in sharp contrast to the slump in demand early this year.

June tonnages already have been largely allocated. They indicate another monthly figure above 150,000 tons, marking the fourth month in a row at this high rate. Whole story is artillery shell casings.

And there is a footnote on the history of steel shell casings. The Army pretty much eliminated them several months ago (although Navy continued with them for 40-mm. antiaircraft) but has been taking some steel casings with brass bands to handle the expansion problem.

Stories coming back from Britain through diplomatic channels indicate the English are getting ahead of us on postwar product engineering.

England's policy on release of materials for experimental models of

THE OUTLOOK (Continued)

BUSINESS WEEK
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consumers' durable goods is more lenient than ours. **These reports envision England's beating us into export markets by months.**

Result is bound to be agitation for relaxing and simplifying WPB's Order P-43 (BW—May 6 '44, p12) governing experimental models. The muddled thinking of this broad policy rule already is subject to heavy fire.

•
"We can beg and beseech but not ban." That's what the paper people in WPB say about the fancy printed matter industry turns out.

They realize all they can do is appeal to industry for cooperation. **Their eyes are on house organs, pamphlets, lavish promotion material** as well as on cartons and wrappings. Don't stop, but cut down and simplify.

On containers, positive rules are compelling more units to a carton. Mother found it handy to buy a dozen jars or tins of baby food at a time, so they were packaged and shipped that way, but not any longer.

•
Postwar planning doesn't overlook the products turned out by the farmer.

University of Minnesota has devoted several years to developing hybrid hogs and has interested several farmers in trying them. Simultaneously, the U. S. Dept of Agriculture has worked out a system of selecting hogs in breeding so as to speed herd improvement and lift pork production.

And, taking a tip from hybrid corn, Dept. of Agriculture researchers are promising increased onion yields.

•
Keeping an alert eye on prices will pay dividends to any company interested in the competition between old-time standard metals, the light metals, and the rapidly growing field of plastics.

Two recent price reductions call this to attention, even though the plastics involved are somewhat specialized and relatively expensive. Du Pont's Lucite sheets have taken cuts ranging from 4.5% to 10.8%, and Rohm & Haas' Plexiglas sheets have dropped a straight 10%.

On the raw material side, du Pont has reduced the price of formaldehyde (going into phenol and urea plastics and adhesives) 10% in tank-car lots.

•
We are not quite ready to resume residential or industrial construction. Best policy is simply to disregard the rumors and denials altogether.

The key to the whole situation is lumber. It is critically short, and you can't do much building without it. Best supply is in timbers—and we are resawing them to get more vitally needed light stuff.

Vast supplies of lumber have been exported for invasion. On the experience in Naples, where half a billion board feet were required to rehabilitate harbor facilities, the Army figures on huge needs for ports to supply Allied troops wherever they get a toehold on the continent.

But remember these things: Most conspicuous field of unemployment is construction; the building industry has no reconversion problems to speak of; lumber will ease suddenly when Germany collapses—or even before; and **Washington will give building the go-ahead as early as it can** because this is counted on to cushion any demobilization spill in business.

•
Quickest way to curb speculation in urban homes is to build more of them. John H. Fahey, commissioner of the Federal Home Loan Bank Administration, warns that this speculation already is threatening to get out of hand.

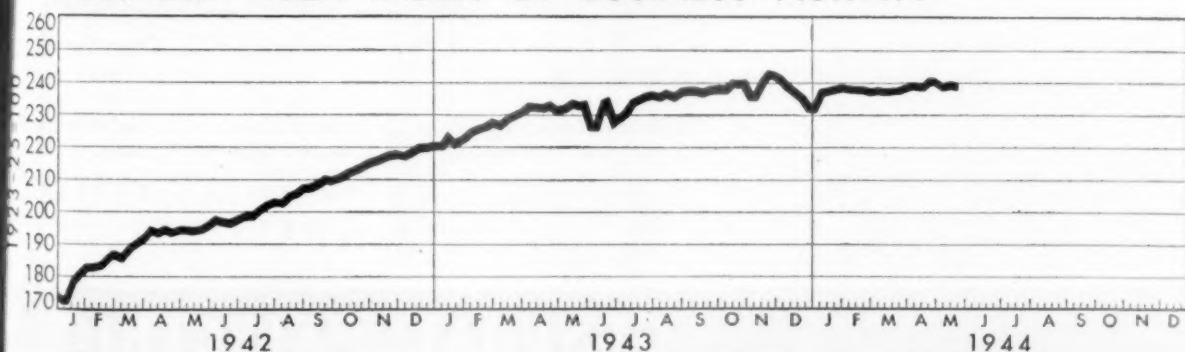
FIGURES OF THE WEEK

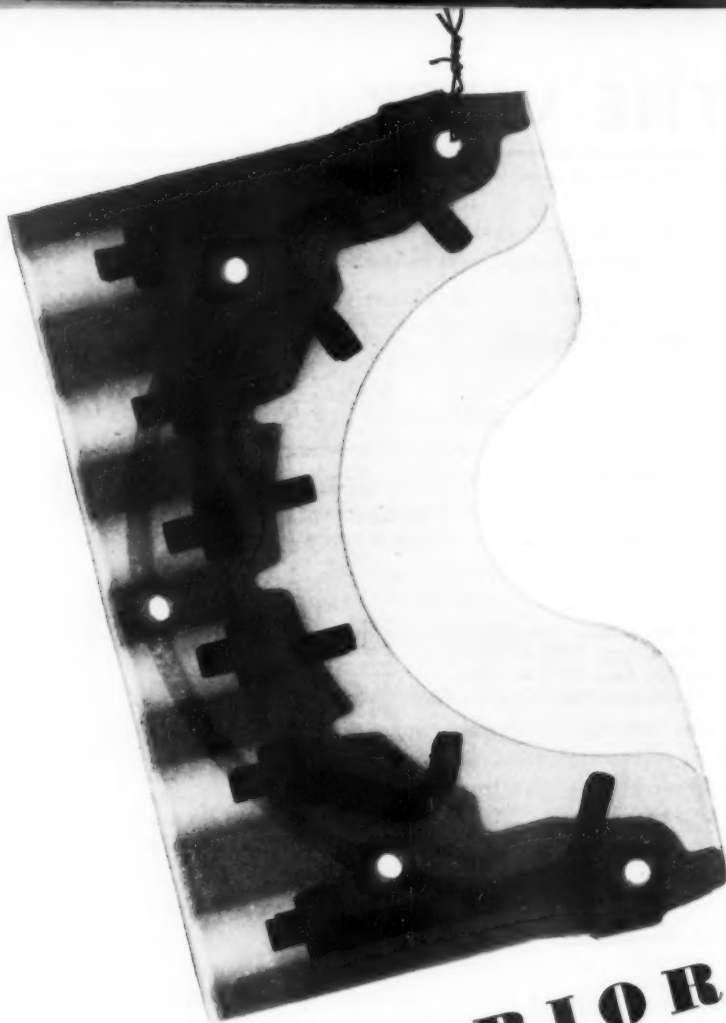
	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below).	*240.0	†240.2	241.3	243.8	234.0
PRODUCTION					
Steel Ingot Operations (% of capacity).....	98.4	99.2	100.0	99.1	99.3
Production of Automobiles and Trucks.....	17,770	†17,080	16,905	18,440	19,175
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$5,786	\$5,738	\$6,043	\$9,256	\$11,402
Electric Power Output (million kilowatt-hours).....	4,246	4,238	4,344	4,513	3,992
Crude Oil (daily average, 1,000 bbls.).....	4,513	4,502	4,427	4,414	4,006
Bituminous Coal (daily average, 1,000 tons).....	2,093	2,025	1,958	1,910	2,016
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	82	81	80	83	80
All Other Carloadings (daily average, 1,000 cars).....	63	59	54	58	61
Money in Circulation (Wednesday series, millions).....	\$21,846	\$21,725	\$21,334	\$19,559	\$16,795
Department Store Sales (change from same week of preceding year).....	+31%	†+9%	—11%	+15%	+16%
Business Failures (Dun & Bradstreet, number).....	28	32	20	29	47
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	250.3	249.7	249.8	244.6	245.8
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	163.9	163.2	162.9	160.5	160.1
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	223.6	222.3	222.4	213.8	207.6
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.62	\$1.64	\$1.64	\$1.57	\$1.38
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	21.03¢	20.96¢	20.99¢	19.77¢	21.22¢
Wool Tops (New York, lb.).....	\$1.340	\$1.305	\$1.313	\$1.280	\$1.345
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.).....	96.4	95.5	93.3	89.6	94.6
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.62%	3.65%	3.67%	3.83%	3.90%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.72%	2.73%	2.73%	2.72%	2.74%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4- to 6 months, N. Y. City (prevailing rate).....	3%	3%	3%	3-3½%	3-3½%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks.....	35,362	34,932	34,248	32,649	30,652
Total Loans and Investments, reporting member banks.....	50,319	50,611	51,453	51,989	47,368
Commercial and Agricultural Loans, reporting member banks.....	5,990	6,015	6,151	6,435	5,745
Securities Loans, reporting member banks.....	1,779	1,818	1,961	2,294	1,751
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	37,232	37,635	38,110	37,857	34,215
Other Securities Held, reporting member banks.....	2,851	2,809	2,885	2,821	3,079
Excess Reserves, all member banks (Wednesday series).....	900	800	900	1,096	1,638
Total Federal Reserve Credit Outstanding (Wednesday series).....	14,382	13,713	13,330	10,372	6,434

Preliminary, week ended May 20th.
Ceiling fixed by government.

† Revised.
§ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





INTERIOR DESIGN

The above fluoroscopic photograph shows the intricate and precise molding of metal inserts in a plastic part. The beauty and function of plastics are often more than skin deep and only a thorough knowledge of the many and varied plastics materials can insure the proper engineering for your application. The technicians of the General Electric Plastics Divisions, with their backing of years of research and knowledge stemming from accumulative experience, can help you. Call upon General Electric with assurance that your plastic application will be studied with "X-Ray" eyes. Write Section I-305, One Plastics Avenue, Pittsfield, Mass.

Hear the General Electric radio programs: "The G-E All-girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. EWT, CBS.

FIFTY YEARS IN THE PLASTICS INDUSTRY

BUY WAR BONDS

GENERAL  ELECTRIC

PD-305

Are All Workers War Workers?

NWLB head says yes, unless Congress delineates those segments of the economy which are at war and those which are not. Testimony in Ward inquiry is tipoff on Administration strategy

The Montgomery Ward case continues this week to make page one news in Washington, Chicago, and Springfield, Ill.

Tip to Congress—In Washington, before the hostile Ramspeck committee in the House, the Administration took no initiative, offered no apologies for seizure of the Chicago facilities of the mail-order house, stoutly defended its action and called on Congress to take the responsibility through new legislation for any change in wartime labor policy.

Critical congressmen expected Administration spokesmen to appear meek and chastened, they were disappointed. The first witness before the committee, William H. Davis, chairman of the National War Labor Board, presented a stinging statement against Montgomery Ward & Co., and set the tone which other government witnesses proceeded to follow.

At War or Peace?—The tenor of his remarks, and the tipoff to the position the Administration will take in keeping opponents from making political capital out of the Ward imbroglio, are revealed in Davis' statement that "Until Congress tells us clearly and explicitly that there are segments of our war economy, men and women, trades and skills that are not in the war, we cannot accept such artificial limitation on our wartime duty to endeavor to preserve industrial peace in America."

Davis testified that his board had taken jurisdiction over 23 disputes involving Ward because of the unanimous opinion of its members that the company, with 78,000 employees in more than 600 establishments supplying farm families with some 20% of their living and working requirements, "engaged in activities directly related to the successful prosecution of the war."

Breakdown Feared—Inability to act in the Ward cases, Davis told the committee, would mean that NWLB was barred from intervening in labor disputes involving 15,500,000 persons employed in transportation, distribution, and service industries. Consequently, according to Davis, this group would be free to strike, and this would lead

to a complete disintegration of existing machinery to preserve industrial peace.

In concluding what was taken to be the approved White House declaration on the government's role in the Ward case, Davis said: "I submit . . . that the only way to have an effective no-strike policy is to ban all strikes, and the only way to ban all strikes is to have a forum where all disputes can be peacefully resolved, a forum whose statutory authority is incontestable and whose decisions must be accepted."

Attorney General Francis Biddle, in his appearance before the Ramspeck committee, likewise put it up to Congress to change the law if it believed the President exceeded his authority in the Ward case.

• Negotiations Begun—In Chicago, a committee of C.I.O.'s United Retail, Wholesale & Department Store Employees, representing Ward employees, met with company officials and presented a list of 17 demands for inclusion

in a new contract to supplant the one that expired last Dec. 8. Expiration of that contract started the train of events which culminated in government intervention.

The union committee left its first conference with management since seizure of the Ward facilities in a pessimistic frame of mind. It reported that the company had rejected its demands for a union shop, arbitration of disputes, seniority, checkoff, and other key points. Requests for a 5¢-an-hour wage increase to a 50¢-an-hour minimum, vacations, and a retiming of production schedules reportedly were taken under consideration. The company made no statement on the progress of negotiations.

• Another Showdown?—Union spokesmen and outsiders seemed generally agreed in a prognosis that the negotiations eventually would break off with basic issues unsettled and that the case would be handed to NWLB for disposition. This would schedule for some future date another showdown between President Roosevelt and Sewell L. Avery, Ward's board chairman, over the question of whether the company will acknowledge the authority of NWLB.

• Hummer Plant Seized—In Springfield, Ill., the Hummer Mfg. Co., a



Before the bell, fellowship ran high as William H. Davis (right) NWLB chairman was greeted by members of the special House committee—(left to right), Rep. Robert Ramspeck,

Charles Dewey, Charles Elston, and Carl Curtis—probing U. S. seizure of Montgomery Ward plants. Later questions and answers came fast as the committee buckled down to work.

Montgomery Ward subsidiary, was taken over by the Army to end a 17-day-old A.F.L. strike growing out of Hummer refusal to accept an NWLB maintenance-of-membership order issued Apr. 14. As a subcontractor to Bendix Aviation, Frigidaire, Sangamo Electric Co., and Weaver Mfg. Co., Hummer makes carburetors, propellers, and gun mounts for the armed services as well as its peacetime products of farm machinery and repair parts. It employs between 400 and 450 workers.

Montgomery Ward management reacted far differently to the Hummer seizure than to the Chicago takeover. Two high Ward officials came to Springfield to assist in installing government control and pledged full coopera-

tion. No one had to be carried off the premises.

● **Point for Roosevelt?**—The sharp contrast was regarded in Washington as support for a belief that Roosevelt had stolen a march on Avery. It was assumed in some circles that the company had been prepared to comply with the NWLB order if the President had so requested, particularly because its refusal in the Chicago case had been based in part on the claim that the mail-order business was not essential to the war effort. If Avery had been given a chance to accede to a presidential order in the Hummer case, he might have strengthened his hand in beating off a second government move to intervene in the Chicago dispute.

But NWLB—not Roosevelt—asked Avery to comply, and its request made no impression. Hence NWLB sent to the President the papers testifying to the company's defiance, and after a twelve-day interval Roosevelt ordered the seizure—without the usual direct last-minute appeal to the company.

JUNGLE SHIPYARD

Set up on a New Guinea beach, a bustling military assembly yard (below) provides further proof of the vital importance of ship cargo space for today's fighting in distant places. Sent knocked-down in crates by U. S. makers to save room and simplify handling, LCM's (landing craft, mechanized) are fitted together just behind the battlefield by Army engineers who lunch (left) an average of nine craft every 24 hours.



Battle of Bureaus

Brickbats fly in wrangle over progress of farm equipment program: Nelson says it's O.K. WFA says it's not.

Everybody favors giving the farmer adequate machinery for planting and harvesting his crop. There is less unanimity about whether he is getting as much as he should have. Congressmen, farm organization leaders, and the War Food Administration have in recent weeks expressed grave doubts about current progress of the farm equipment program.

● **Interbureau Brickbats**—WPB Chairman Donald Nelson last week issued a statement detailing the checkered history of farm machinery output under federal regulation. His release was designed to reassure the worriers. Instead they questioned the accuracy of his statistics. At midweek, the air still was filled with the brickbats of as pretty a little interbureau battle as has been seen since President Roosevelt last cautioned his war agencies not to fight in public.

Complicating the picture was an interindustry situation closely related to the battle of the bureaus. Statements which corroborated Nelson's emanated from several of the half-dozen long-line makers of tractors and implements who probably average year after year about 80% of the total U. S. output of farm machinery. Backing up the WFA view were statements from Ford-Ferguson sources which intimated that this rapidly growing industry newcomer (BW—Nov. 13'43, p19) and unspecified small manufacturers were not getting from WPB all the encouragement they might.

● **Three Won't Be Completed**—Largest and most vocal of the long-line manufacturers is International Harvester Co., which compiled a tabulation in units of its authorized production of 61 classes of machines under WPB Order L-257, its completions to date, and a bar chart showing its percentage of performance. The chart disclosed quotas of twelve classes already completed, 46 classes which will be completed within the scheduled periods, and three classes which will not be completed because of lack of manpower.

The three classes that will not be completed are: grain drills, estimated 92% ready by July 31, when the quota of 11,878 units expires; corn pickers, 96% of 10,355 units and combines, 84% of 15,817 units ready by Sept. 30, expiration date for these quotas.

● **Astronomical Increases**—Harvester repeatedly points out that it had to get

at production schedules rolling an almost dead start imposed by Order L-170, which cut output of major companies and concentrated it into the small outfits. Hence difficulties of getting back on to scale manufacture.

Production has increased specifically in many lines: tractors from 511; peg harrows from 32 to 377; planters from 31 to 117.

Case & Co., second largest in the industry, says that the bulk of its schedule will be out on time, that all but a few items will be finished. Allis-Chalmers, third largest, expects to get out its production in the quota period, and an unimportant acreage in completion.

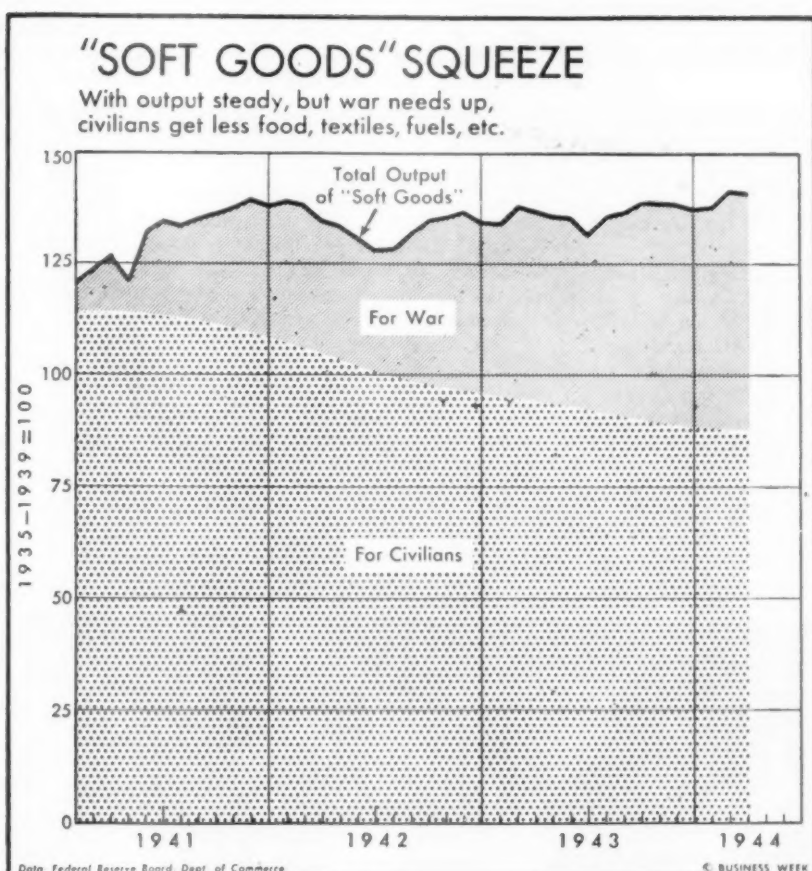
Case Drag-J. I. Case Co. expects to make the program on time, with the exception of a small model tractor, which is lagging a little because the management has never succeeded in getting foundry manpower lost during WPB's attempt at industry concentration.

Case-Harris is meeting all schedule on time. Oliver Farm Equipment has troubles on two items: combine, of which prompt completion of 2,700 is in doubt; and hayloaders which for lack of castings and a particular situation in power will probably end up only completed by the quota expiration.

Professional friends of the farmer concede that war orders must take precedence over farm machinery. This can happen is illustrated by the Allis-Chalmers problem in combines. The company's La Porte (Ind.) plant has been making small combines for the farm and the M-6 heavy artillery prime mover for the Army. Early in the program, Army Ordnance cut back the program. Allis-Chalmers promptly secured an increased quota for making combines.

Again, On Again—Then came the setbacks at Cassino, and the consequent increase in Army demand for guns and equipment. In April, the M-6 production program was stepped up. WPB had to issue a special directive to enable Allis-Chalmers to get its men off the combines, put them on the M-6. Hence the prospective delay in Allis-Chalmers combines is typical of manufacturers that of a single part or accessory can complete an entire schedule. The plant thus hampered usually produces the product as far as possible, sets it aside, and finishes it up in a hurry when the missing parts arrive.

Farm Equipment Lasts—From the total that is being made over tractor and implement supplies available for purchase by farmers, a city man might deduce that it takes a brand-new machine to put in a crop and harvest it. Actually, the average useful life of farm machinery is around 15 years.



This index of soft goods production compiled by Business Week is composed of the combined Federal Reserve Board indexes of production of fuels and of nondurable goods manufactures—textiles, foods, tobacco, soap, paints, etc.—after exclusion of the almost strictly war output in the chemicals industry, in rubber manufacturing, and aviation gasoline. The result is a measure of the output of consumption goods primarily for ci-

vilians but also for the armed forces, lend-lease, foreign relief, etc. Measurement of the civilian portion of soft goods output is based on annual government estimates, projected monthly over the past three years and carried forward currently. In general, these estimates of what civilians have been getting of this production err, if at all, on the optimistic side. The implications of the "soft goods" squeeze are examined on page 120.

Only 6% or 7% of a crop in normal years is the end product of new equipment. The rest is the product of old machines already on the farms.

Total supply of machinery on farms today is high because the industry's output in 1940 and 1941 was extremely large, and 1942 sales to farmers were large because the production quota of 80% of the previous years was supplemented by substantial inventories in dealers' and distributors' hands.

• **More Cash, Less to Buy**—Demand for farm machinery, if not restricted by production limitations and local rationing, would far outrun anything ever previously experienced. Because of his big bank account and his great need for mechanical help, the farmer itches for machinery.

Some of his shrillest squawks may unconsciously be directed against quotas rather than against production.

Production after July 1 continues on the current scale. Barring military interference, next year's quotas will be ready promptly. For the first time during the war, the farm machinery factories are off to a running start.

Cleanup Watched

Army may expand new approach to problem of surplus disposal if experience on tank contract liquidation justifies.

A new approach to the problem of disposing of war goods surpluses is being developed by the Army's Detroit Ordnance District.

The study is being made around one of the largest contract terminations thus far, involving an order with one of the big auto companies for about \$660,000,000 in medium tanks. Contracts with this company and seven others were canceled last year when need for the 30-ton units diminished, leaving about \$125,000,000 in equipment and materials on hand.

Cleanup of these items has been made the subject of a special project at Detroit, now eight months old. It is known that Gen. Levin Campbell, chief of Ordnance, is watching progress closely, and if the method is successful it may be expanded.

• **Approvals Required**—A special contracting officer's representative has been placed in charge of special personnel stationed at the former tank plant. He can sell any goods at prices equal to cost of the goods within Office of Price Administration ceilings, or can transfer the accountability to other government agencies or contracts.

A special property disposal board is set up to approve sales beyond the contracting officer's authority. Sales at less than 80% of cost, or more than \$25,000 if loss is involved, go to Washington for approval.

• **Special Salvage Studied**—Various disposal means for scrap items have been

studied, but indications are that the method is generally to sell them to junkmen. On a die for instance, disassembly was attempted. The cost \$1,016 new, but produced \$5 in usable parts and \$2.46 in metal scrap, against disassembly cost \$33. Similar findings were made on gages and fixtures.

Manufactured material on hand at the time the contract was terminated is being studied by special sales panels. Those which can be transferred to the new tank makers still in production are shifted at the present cost to those contractors. So far, 2,021 items costing \$25,000,000, transfers have been made on 641 pieces worth about \$7,500,000.

• **Some Items Stored**—In addition 284 items classified thus far cost \$4,000,000, which can be modified to meet existing requirements. Sales being made to tank contractors at the actual cost less modification cost.

But 2,813 items costing \$38,000,000 have been found without value except as scrap. Salvage panels determine scrap ability, Washington approves, disposition is then made at full Office of Price Administration prices. Another batch of items cost about \$12,000,000 has no present market, but due to high original cost or ultimate sales potential, the items are being warehoused and held for the future.

• **Bulk Sales Fail**—Attempts were made to sell in bulk about 13,783 tons of steel and other raw materials cost \$758,065, a \$55-a-ton average. Of two bids were received for the lot, however, the higher being but \$20 a ton.

Piece sales were begun after an inventory was mailed to some 7,000 users. These have since disposed 5,503 tons at an average of \$41.70, about in line with actual value, because all the steel is rusted and needs pickling. When no more bids come in, the material will again be offered in bulk, rather than piece.

• **Tools at Cost**—Perishable tools are being made at full government prices. Of 4,347 items worth about \$5,000,000, only 308 have been sold. 760 inspected and packed thus far. Tools are being moved to an Ordnance warehouse.

Miscellaneous manufacturing equipment such as cranes, blowers, compressors, etc., are being inventoried. So far there are 813 items cataloged, of which 712 have been sold, 80 warehoused, 21 retained at the plant.

• **District Transfers**—Disposition along parallel lines on machine tools of which 1,518 items costing \$11,000,000 have been listed thus far. Customary district-to-district Ordnance transfers are made as soon as possible at



WASTE AMID WANT

In protest against a government ban on Sunday wholesale deliveries, officials of the Georgia Milk Producers Confederation dump 1,000 gal. of milk into an Atlanta drain. The recent demonstration climaxed Office of Defense Transportation refusal to alter its rules for the 160-member cooperative which claims the ban causes waste because storage space is lacking. The dumping drew criticism when the War Food Administration said that

Atlanta suffers an average milk shortage of 15,000 gal. a week. The co-op, however, won a minor victory when ODT lifted its rule to permit service to the group's 15 retail stores for one Sunday only. OPA then stepped in with extra sugar rations for Georgia's ice cream makers to soak up local springtime milk flushes, and a half-dozen local firms soon offered to buy up the excess. Haunting the farmers, meanwhile, is the fear of Washington repercussions that would hit the state's federal milk subsidy.

Allies' European Reconstruction Crew

Piled up in England for the invasion—along with guns, munitions, tanks, and jeeps—are thousands of drums of electric wire, miles of portable power-generating sets, tons of water purifier, and great portable soup kitchens.

• **Vast Preparations**—All these are part of the Army's vast preparations to take over the civil administration in liberated regions—areas which, if the invasion succeeds quickly, would include some of the largest cities in Europe.

Carefully drawing up detailed plans for the handling of this vast job are three chiefs of the Allied invasion headquarters' Civil Affairs Dept. (left to right): Brig. Gen. F. J. MacSherry (United States), chief of operations; Lt. Gen. A. E. Grasett (British), assistant chief of staff; and Brig. Gen. J. C. Holmes (U.S.), deputy chief of staff.

• **Veteran Leaders**—Gen. MacSherry headed civilian affairs in Sicily and Italy, and was the first American to arrive at Italian headquarters when the Germans abandoned Naples (BW—Nov. 13 '43, p. 17).

Gen. Grasett, born a Torontoan, won his spurs in the last war, and continued his career there in India.

Gen. Holmes, a Kansan with a career in the diplomatic service topped by practical business experience with General Mills, trained this country's big civilian affairs staff for the Italian invasion. From the staff school, hidden in the mountains back of Algiers, he and Col. John Spofford (Wall Street lawyer) wrote the now-famous handbook used by all Anglo-American civilian affairs administrators.

• **Civilian at Helm**—Topping this trio of generals is a civilian—John J.



McCloy, assistant Secretary of War (cover)—recently named chairman of the Combined Civil Affairs Committee. In this new job, McCloy will carry to the Combined Chiefs of Staff the recommendations of the select little military committee.

A Wall Street lawyer with long experience abroad, McCloy is the War Dept.'s foreign political troubleshooter, works harmoniously with Secretary of War Henry L. Stimson, and Under Secretary Robert P. Patterson, who are also Wall Street lawyers.

• **A Natural for the Job**—McCloy's outstanding political assignment was a journey 15 months ago to North Africa to bring some order into our then disorderly relations with the factionalized French forces. He suggested steps which resulted finally in the merger of Giraud and De Gaulle last June, when the French Committee of National Liberation was set up.

He is a natural for the job of juggling in Washington the political complications incident to the liberation of the occupied countries. His experience in questions of civil administration in military zones dates back to the last war when, a captain of field artillery, he served with the Third Army at Coblenz in the German occupation.

• **Student of Wars**—A member of the New York firm of Cravath, De Gersdorff, Swaine & Wood, McCloy traveled throughout Europe from June, 1927, to September, 1928, then in April, 1931, took charge of the Cravath office in Paris, running it for a year. Since then his business trips to Europe were frequent.

A student of military history, McCloy was appointed expert consultant to Secretary Stimson in October, 1940, became special assistant to the secretary three months later, and was appointed assistant secretary on Apr. 22, 1941.

units are checked and declared surplus.

By this means, war contractors throughout the country are put in touch with the goods. Those unsold are warehoused. Up to now, 1,314 machine tools have been sold or transferred, 43 shipped to warehouse, and 43 still held at the plant.

• **Gages Sold and Scrapped**—There are 4,255 gages and measuring devices costing \$520,000. Standard pieces are inspected by Ordnance and put into excess or declared excess. Specials are offered for sale. If unsold, they are converted to standard use if possible,

otherwise scrapped. So far this procedure has resulted in 3,148 items being declared surplus and 1,871 being classified as scrap.

Molding equipment costing \$4,000,000 is expected to be a dead loss on such requirements as patterns, copes, drags, etc. Foundries have been invited to bid on flasks included in the 2,063 pieces. Of the 2,691 jigs and fixtures costing \$8,000,000, those weighing less than a ton will be dismantled to obtain usable parts for possible sale. The others will be held for general sale. Heavier units will be stripped of obviously usable parts, and the rest scrapped.

• **Space Tied Up**—Mixed reaction has greeted this plan in industry circles. It is admittedly a practical means of disposal while the war continues and a fair share of the leftovers can be put to practical use.

This may also hold nearly as true afterwards provided the material is moved in its entirety to warehouses or other government space. Otherwise—and this is where industry crosses its fingers—the months required for cleanup today may be multiplied, and valuable factory space required for civilian goods production will be tied up and reconversion delayed.

Man-Made Plasma

Gelatin-base substance is only partial substitute for blood plasma. It will be used by civilians, not by the armed forces.

Development of a partial substitute for blood plasma, disclosed exclusively in *Business Week* (BW—May 20 '44, p. 5), continued this week to excite characteristic carefully moderated enthusiasm among scientific men everywhere.

Medical authorities, recognizing limitations upon its use and supply, are in full agreement that nothing should be said or printed about the jellylike, gelatin-base substance that would in any way deter present and prospective blood donors from making regular donations to the Red Cross. They emphasize that the development does not remove the need for vast quantities of blood plasma for the military service.

• **Old Problem Licked**—Medical enthusiasm for the new formulation stems from the fact that it licks a scientific problem that has defied solution since the World War, when intravenous injections of various gelatin mixtures were tried repeatedly and abandoned.

They worked pretty well in their two primary jobs of replacing body fluids lost during bleeding and of bolstering up low blood pressure which accompanies shock, but they too frequently left patients with fevers.

Whatever the mixtures used, there

seemed always to be microscopic pyrogens, or fever-producing substances, present in them, and military doctors decided on the need for further research.

• **Research Coordinated**—Little research was accomplished with gelatin as a plasma substitute until the Charles B. Knox Gelatine Co. put its laboratory to work on it in 1940.

After the U. S. came into this war, and the Office of Scientific Research & Development was organized, the members of the Edible Gelatine Manufacturers' Research Society of America, and several hospitals and medical colleges were asked to coordinate their research on plasma gelatin.

• **Minimum Duplication**—OSRD asked the National Research Council to permit its subcommittee on blood substitutes to act as OSRD deputy and coordinator for the entire project.

Members of the subcommittee went into action to see that there was minimum duplication of effort in the laboratories of Atlantic Gelatine Co. and Wilson & Co. (which may be said to have carried the torch for the other members of the manufacturers' society—American Agricultural Chemical Co., Eastman Gelatine Co., Kind & Knox Gelatine Co., Milligan & Higgins Corp.) and the Chas. B. Knox Co. (which utilizes its affiliate, Kind & Knox, as its supplier of raw gelatin for its line of packaged food products and thus in a way got in a double dose of research, inside the society and out).

• **Tested in Hospitals**—Duplication of effort was likewise minimized among Beth Israel Hospital, Boston; Cook

County Hospital, Chicago; Michael Reese Hospital, Chicago; and the medical faculties of the Universities of Chicago, Harvard, Louisville (Ky.), Pennsylvania, and others no less important.

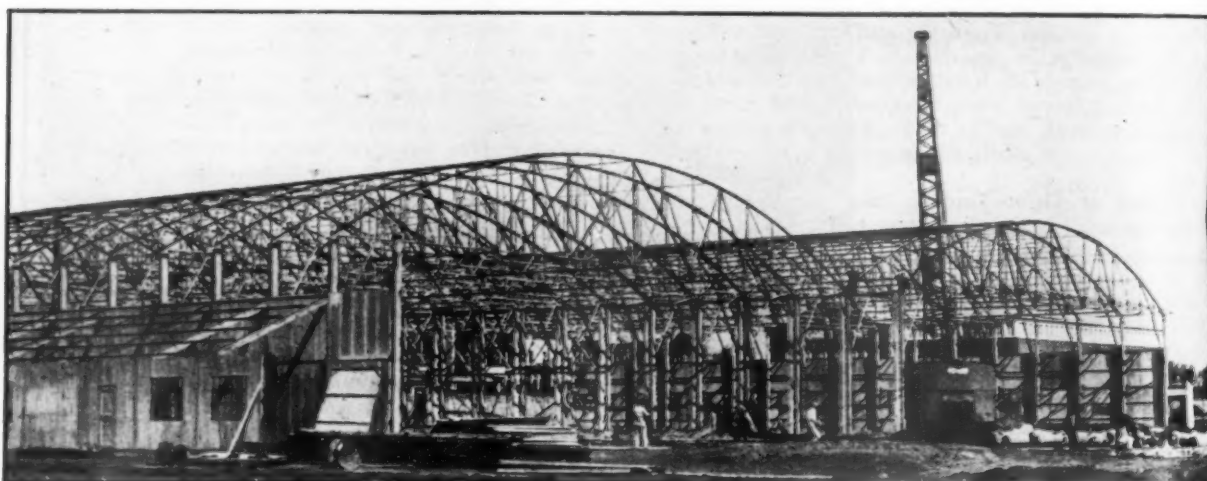
Manufacturers' laboratories no sooner turned out experimental lots of gelatin compounds than the hospitals and colleges were putting them to the most severe tests that could be devised.

• **Pyrogens Overcome**—One by one they jointly conquered various pyrogens responsible for fever, only to find that the proteins in their preparations were made up of molecules differing in shape from those of blood plasma proteins, hence producing dissimilar results when injected intravenously.

Gelatin molecules are long and slender "chains," similar in shape to rubber molecules; plasma molecules are about twice the diameter and egg-shaped. Work proceeded day and night in changing the shape of the ultimate particles of gelatin as such.

• **Molecule Chains Broken**—The many researchers never did succeed in achieving a gelatin molecule identical in shape to that of natural plasma, but by dint of a somewhat complicated series of heatings, coolings, reheatings, and other physiochemical processes, differing considerably from standard gelatin processing, they broke the chains into random bits of shorter length, but of no greater diameter than formerly.

Differences in molecular size and shape account largely for the fact that gelatin plasma is only a partial substitute for the natural substance; differences in manufacturing technique call



FUTURE AIR BASE

One of the largest privately owned hangars in the world is being built on a two-acre site at the Atlanta Municipal Airport by Southern Air-

ways, Inc. When completed around June 1, the 280x160-ft. structure will be headquarters for the company but under a 20-year lease will eventually revert to the city. Steel for the \$100,000 hangar was obtained without pri-

orities from surplus stocks of the Erwin-Newman Co., Houston, Tex. Southern's purpose in building it now is to advance postwar plans for expanding its sales, training, and charter service into a web of feeder airlines.

ing for new equipment account for the fact that the medical world will have to wait until fall for volume output.

- **Aids Shock Patients**—The gelatin solution most recommended by the subcommittee in a recent report to OSRD (consisting of a 6% concentration of the new gelatin in a normal saline solution of about 0.6% sodium chloride, known to medical men as the "Knox P-20 type") works well in relieving cases of shock and somewhat less well in replacing lost blood.
- **Limitations**—Medical men believe too that the longer rod-like particles of gelatin persist in the blood stream, perhaps becoming responsible for "rouleaux formations" of red blood cells wherein they stack up like so many coins in a rouleau, or coin package, and are even responsible for an increased sedimentation rate of red cells plus changes in the distribution of natural plasma proteins between the blood stream and the body tissues.

Even more serious from the standpoint of using the gelatin substitute on the fields of battle is the fact that the solutions gel at about 68°F and therefore cannot be used without prior heating in cool or temperate climates.

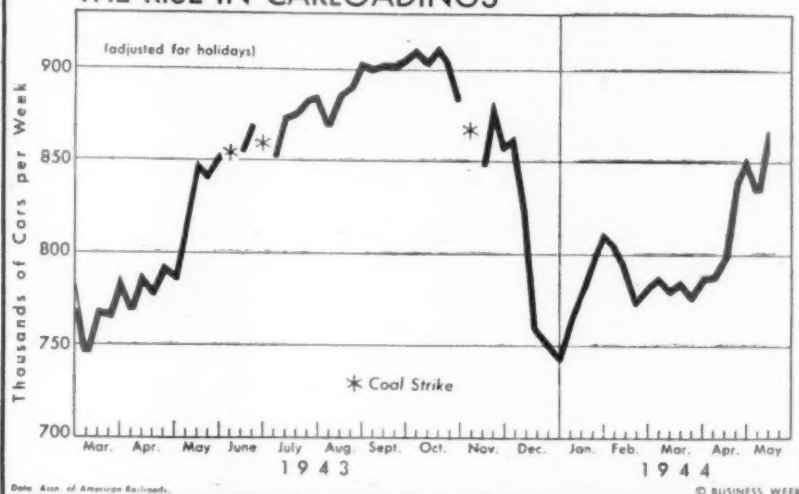
- **Use in U. S. Urged**—However, now that they have licked the pyrogen problem and have gone a long way toward getting gelatin molecules into plasma sizes and shapes, gelatin manufacturers are asking medical men to reserve judgment until their present solutions have had time to demonstrate their worth and until new compounds, still in the laboratory stage, have been perfected.

They don't ask that gelatin plasma be shipped out to remote quarters of the globe for use by the Army and Navy, but rather that it be used now in the nation's hospitals to relieve civilian demands for whole blood and plasma and to furnish plasma substitutes for certain foreign hospitals, such as those in India, where religious beliefs interfere with the use of blood or products made therefrom.

- **Transfusions Best**—Gelatin manufacturers believe not only that their products will keep better, and without refrigeration, than natural plasma, but that members of a good big section of our population cannot afford current prices for transfusions.

They are in full accord with medical men in the current thought that the best substance for intravenous injections is whole blood, transfused directly from a donor; next best is whole blood from a refrigerated blood bank, followed by blood plasma or human serum albumin, which is a more concentrated form of plasma, and gelatin plasma; but they believe that the next few years will tell a different story.

IN THE OUTLOOK: THE RISE IN CARLOADINGS



Since the middle of April, freight traffic has taken its seasonal upturn, made sharper this year by the fact that coal loadings have not dropped off as they usually do at this time. Early this year, it began to appear that the traffic trend would rebound, contraseasonally, toward last autumn's peak (BW—Feb.12'44,p21). Instead, the rail-

roads got a breathing space during which to restore their working forces—and employment has been expanded about 5% since the turn of the year. There will be some seasonal loss of labor to the farms, however, and scarce forgings will slow the delivery of new and repair equipment between now and the October traffic peak.

Kick on Stoves

Why OPA continues to ration them is subject of special inquiry by WPB. Trouble rooted in attempt at concentration.

Needled by congressional demands, WPB Chairman Donald M. Nelson has ordered a special inquiry into the domestic cooking and heating stove program, with an eye to determining why most such stoves are still rationed.

- **In Disagreement**—WPB officials charged with administration of the program have been asking the same question. They think that certain types of stoves, particularly coal and wood heating stoves, could be safely removed from rationing (BW—May20'44,p7). OPA does not agree.

Theoretically, WPB has the authority to tell OPA to take stoves off the ration list, willy nilly. But officials prefer to exhaust the possibilities of bringing OPA around to their point of view. This not only is diplomatic, but doesn't leave WPB holding the bag alone if stove production should take a turn for the worse.

Production of almost every type of

stove is well above last year's levels. Any decision by top WPB officials to abandon rationing is expected to be made only after careful consideration of the outlook for future high production, which, in turn, hinges on the outcome of the invasion and the availability of steel for civilian use.

- **Only Part of the Trouble**—WPB admits that rationing is only part of the trouble. The rest goes back to the early days of the war. Stoves were WPB's first experiment in concentration of industry—the scheme under which an industry's entire wartime output was to be crammed into the smaller plants in loose labor areas, leaving the larger plants and those in tight labor areas free to get into war production (BW—Jul.25'42,p15). WPB soon relinquished its dreams of wholesale concentration, but by that time it was too late to change the signals on stoves.

Under concentration, stove manufacturers were divided into three groups: class A companies (doing a dollar volume of over \$2,000,000 annually); class B companies (a dollar volume of less than \$2,000,000, but located in tight labor areas); class C companies (a dollar volume of less than \$2,000,000 and located in loose labor areas). The A and B manufacturers were told to kiss their

Figures Fly in Stove Rationing Wrangle

WPB cites production figures to support its contention that certain types of stoves—notably coal and wood heaters—are now in sufficient supply so that OPA could remove them from rationing. Here is how current production compares with prewar averages, by types:

	Production Three Months Jan.-March 1944			Production Oct., 1943, Through March, 1944	
		1930-39 Avg.			1930-39 Avg.
Cooking Stoves					
Gas ranges.....	150,000	258,000	Gas, radiant, bath-		
Gas hot plates*.....	8,800	32,000	room & circulating	288,000	296,000
Coal and wood.....	108,000	157,000	Coal and wood.....	894,000**	905,000
Fuel oil.....	150,000	260,000	Portable oil heaters...	89,000	152,000
Combination ranges..	16,000	19,000	Other oil heaters....	49,000	520,000
Portable & drum ovens*	139,000	126,000			

* Unrationed.

** Includes 432,000 unrationed airtight sheet metal wood heaters, without crates.

OPA's figures on the number of stoves it has available for rationing show that it is getting considerably less than total production of most types.

There are two reasons for this: (1) Ration quotas are made up after the needs of the various claimant agencies—the Army, the Navy, Foreign Economic Administration, National Housing Agency—have been met. WPB contends that civilians are still getting almost the entire output even if not through rationing machinery, since NHA, which is allotted stoves for war workers' housing, is the biggest claimant. (2) Although OPA gets its production figures from WPB, its statisticians use a different brand of arithmetic, hence come out with smaller production totals for most types.

	Number Available for Rationing Jan.-March, 1944		Number Available for Rationing Oct., 1943, Through March, 1944
Cooking Stoves			
Coal and wood.....	100,000	Gas	250,000
Fuel oil.....	90,000-100,000	Coal & wood.....	382,000
Gas & combination ranges.	116,000	Oil heaters, all types.....	88,000

One reason WPB and OPA can't come to a meeting of minds on the question of to ration or not to ration is that WPB compares present production with average output during the thirties, and finds it good, while OPA keeps a longing eye on production during the industry's base period (the last half of 1940 and the first half of 1941), and finds that current output suffers by comparison.

This is how OPA compares the supply of stoves available for rationing, percentage-wise, with total rationed demand and with base period production:

	% of Rationed Demand	% of 1940-41 Production		% of Rationed Demand	% of 1940-41 Production
Cooking Stoves					
Coal & wood.....	74	56	Coal & wood.....	100	68
Gas	50	14	Oil	90	20
Oil	74	25	Gas	91	38

stove business goodbye. The C producers were given enough iron and steel to enable them to turn out 70% of their base period (year ended June 30, 1941) output of cooking stoves, 50% of heating stoves (BW—May 23 '42, p16).

• **Metal Went Further**—As the metals situation eased, these quotas were relaxed. Additionally, the C companies soon found that iron and steel went a lot further than WPB expected when applied to stripped-down Victory models. Some C companies soon were turning out several hundred percent of their base year production. In 1943, several of them reached a volume of \$5,000,000 to \$7,000,000—or enough to have put them in class A.

Figuring that this performance had

gone far enough, WPB amended its restrictions last summer to permit A companies to get back in production (provided they were not located in tight labor areas) after C manufacturers received materials quotas equal to 100% of their base year output.

• **On the Way Out**—WPB is now considering scrapping concentration entirely, putting the whole industry on a straight quota basis.

Most A companies haven't hurried to get back in. They have had plenty of war orders, and they haven't been overanxious to slap their brand names onto Victory models which even WPB admits are below par.

Recently WPB has lifted weight and other restrictions so that the industry

can now produce a standard, prewar model of most types. The only important accessory now banned for a gas cooking range is the oven regulator.

• **Ranges Pile Up**—Elimination of Victory models also should help to take some of the kinks out of rationing. A purchaser must produce a certificate from his ration board to buy a stove. Although there aren't enough gas ranges to supply demand, inventories—totaling some 60,000—are piling up on manufacturers' hands. WPB and OPA suspect that dealers have been holding on to ration certificates, urging consumers to wait until they get something that looks more like a prewar model. At the end of March there were 183,000 ration certificates outstanding for gas ranges, in the hands of dealers and consumers, while only 33,000 ranges were on order from manufacturers by dealers.

• **Other Reasons?**—Manufacturers claim that freezing of certificates by dealers makes it impossible for them to plan production.

OPA suspects that manufacturers have other reasons for wanting to get out from under rationing—the principal one being a not unnatural desire to line up dealer organizations and concentrate markets as a preliminary to postwar production. OPA has recognized exclusive agency agreements and made other attempts to preserve the normal business pattern, but rationing, nevertheless, has made mincemeat of prewar distribution.

• **Local Distribution**—With the exception of gas and electric ranges, makers of most types of stoves do not have national distribution. Their product is sold in the area in which it is made. But under rationing, any manufacturer is required to honor a ration certificate from any dealer. The West Coast was supplied largely by class A manufacturers before the war. When these were "concentrated" out of business, manufacturers in other parts of the country had to take care of western dealers.

OPA claims that small dealers (represented by such groups as the National Retail Hardware Assn.) favor rationing as the only means of assuring them a fair share. WPB contends that inventory and other restrictions make rationing as much a burden for retailers as for manufacturers.

OPA thinks it would be safest to wait until the season of peak demand has been passed next fall before abandoning rationing.

• **Quotas Removed**—Rationing officials point out that OPA has now removed quotas on the number of certificates local boards may issue for coal and wood heating stoves. OPA this week also increased dealers' allowable inventories of most types of rationed stoves.

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Fight on Fraud

Government bears down on war contract manipulation. Big Seattle shipyard probe is just one of many investigations.

FBI agents worked busily in Seattle this week, piecing together for the Justice Dept.'s War Frauds Unit information on a shipbuilding company that is said to have taken on \$1,000,000 worth of government contracts without bothering to build a shipyard.

• **Cow Pasture**—The phantom shipyard is one of the most spectacular wartime cases, replete with stories of how cows graze on the site specified in the contract as the location of the yard. But in two years of operation, the War Frauds Unit, which supervises prosecution of all fraud cases growing out of the war program, has got used to spectacular stories. On its books the shipyard probe simply counts as one of 1,400 pending investigations into possible frauds.

• **Pointed Reminder**—However, the Seattle case served as another reminder to businessmen that the government is bearing down on war fraud investigations, and that Army, Navy, and other federal department auditors constantly are on the lookout—as they will be for years after the war ends—for evidences of illegal manipulations of war contracts. The reminder was more pointed because of the growing belief in Congress that too many frauds go unnoticed.

But Justice Dept. officials are quick to say that only a fractional percentage of the government's war contracts have involved any fraud. They think that the overwhelming majority of the country's contractors have been bending over backwards to avoid sharp practices.

• **Damage Mounts Quickly**—But they contend that no all-out production program can be managed without letting in a certain number of chiselers, and they point out that by padding costs or delivering inferior goods a dishonest contractor can cause damage out of proportion to his size.

At this stage of the game, no one can tell how effectively the government is protecting itself against fraud. Justice Dept. officials maintain that they are covering the ground pretty thoroughly, and other government departments think that comparatively little fraud is slipping by unnoticed.

• **Some Skeptical**—One or two officials believe, however, that just on the law of averages a production program of \$70,000,000,000 a year should produce more than 284 indictable cases, even allowing

for the fact that most contractors are completely honest. In Congress there is feeling that Army and Navy auditors aren't watching closely enough for fraud, and that cases are getting past without even being reported to the Justice Dept.

• **How the Unit Works**—Government prosecution in most fraud cases is divided into two parts. The War Frauds

STEEL MAKER ACQUITTED

A verdict of acquittal in one of the most widely publicized war fraud cases—that involving a United States Steel Corp. subsidiary—this week failed to dampen the ardor of the War Frauds Unit in the Dept. of Justice which prosecuted the case.

In Pittsburgh, a federal jury of six women and six men found the Carnegie-Illinois Steel Corp. not guilty of concealing and falsifying records on steel plate tests for government contracts. The court dismissed another charge alleging destruction of records at the steel company's Irvin works.

The litigation grew out of an investigation by the Senate Truman committee in 1943, which was started after Shipbuilder Henry J. Kaiser complained that faulty steel was responsible for a tanker's breakup. The committee charged that on a small percentage of plates at the Irvin works, tests were manipulated to meet specifications.

When the decision was handed down, a civil suit for damages and another indictment (BW—Oct. 23 '43, p. 27) charging the corporation and one employee with conspiracy to conceal facts about the test plates were pending, but neither of these was regarded as likely to yield a conviction, even if pressed by the government. Another pending case is a \$2,000,000 "informer" suit brought against Carnegie-Illinois by a Chicago citizen (BW—Mar. 27 '43, p. 7).

The acquittal was hailed by J. L. Perry, company president, as an acknowledgement that "the unfair and unsubstantiated accusations of the Truman committee have been completely refuted."

In Detroit this week Bohn Aluminum & Brass Corp. and three of its supervisors were acquitted in federal court on charges of conspiracy to defraud the government in a case involving welding vital castings.

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Unit handles criminal suits and supervises investigations. If it turns out that the fraud has resulted in overpayment or acceptance of substandard products, a special section of the Claims Division brings civil suit for damages. The actual sleuthing is usually done by the FBI.

The War Frauds Unit was set up in December, 1941, just after the United States entered the war. In comparison with the record of previous wars, this was an unprecedentedly fast start. Prosecution of frauds arising out of the World War did not begin until 1922, and closed four years later with a record of only 37 indictments and two convictions.

• **Plan Is Revised**—The War Frauds Unit as it was set up in 1941 came under the joint supervision of the Criminal Division and the Antitrust Division, but after an intradepartmental shuffle it moved entirely into the Criminal Division. At the moment, the unit consists of 24 men in Washington and 43 field attorneys.

So far, the War Frauds Unit has received a total of 4,673 complaints, of which 3,232 have rated a formal investigation. The others either were obviously unfounded or were duplicated complaints already under investigation. About 1,675 of the investigations have been closed without any further action. The remainder either resulted in an indictment or are still pending.

• **Many Plead Guilty**—Up to May 1, the War Frauds Unit had got 284 separate indictments, involving 486 individual defendants and 47 corporations. Of these, 146 individuals and five corporations had entered pleas of guilty; 47 individuals and five corporations had been convicted; 23 individuals and 15 corporations had entered pleas of nolo contendere (accepted the penalty without admitting guilt).

However, the Justice Dept. now has a policy of refusing to accept nolo pleas unless the court jams them down its throat.

To date only 14 cases have ended in acquittal. In convictions of individuals, the typical penalty has been a fine or imprisonment running from one to three years. One defendant drew a twelve-year sentence, however. Fines collected total about \$600,000.

• **Tips Help Out**—Most cases start with a complaint or a tip from someone who has come across evidence of fraud. Army and Navy auditors may discover cases of padded claims, or an employee at a plant may become suspicious of the way operations are being conducted.

In one case, an inspector who had been discharged reported that the testing machines were producing curious results. In several others, congressional

What our Navy's best-kept secret means in wartime



WHEN THE BATTLESHIP *Maryland* put to sea one day in the mid 1920's, few people knew that she was on her way to test a new and secret device.

This device was an electro-mechanical sighting and computing instrument... an incredibly nimble, accurate, and tireless "metal brain." The *Maryland's* tests were successful, and the U. S. Navy had solved one of the toughest problems of naval warfare.

For the first time in history, the gun-

ners of a rolling, pitching ship were able consistently to hit a target regardless of the erratic motion of their own ship or the motion of the target.

The device that made this possible involves many inventions. Its development, (and subsequent improvement), resulted in the U. S. Navy's becoming the fastest, straightest-shooting navy in the world. Other navies have known for years that this device exists, but its design, still a secret, has never been successfully imitated or duplicated.



In the days of "wooden ships and iron men," a gunner squinted along his gun, took aim, and trusted to luck and intuition. His ship's roll and pitch would cause his gun's muzzle to weave about in erratic patterns. Unless he fired the instant his ship was on an even keel, his shot would fly wild. As warships improved and gun ranges increased, the problem of accurate firing also increased.



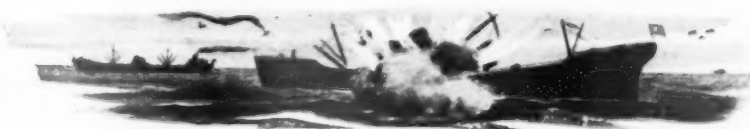
In 1924, the Navy brought this problem to Ford Instrument Company, specialists in producing gun computing equipment. Ford worked with Naval engineers to develop the equipment which furnishes complete data for continuous, accurate firing under all conditions of wind, weather, and water. It enables gunners to hit a bombing plane which has traveled 4 miles after the shell left the ship's gun!



To understand how this gun-fire control system keeps guns trained on a target, imagine yourself riding a bicycle. If, while riding along, you focus your eyes on a flying bird and then roll your head from side to side, nod it up and down... no matter how you move, your eyes stay fixed on the moving bird. That's what happens when U.S. Naval guns are trained on a moving target from a violently tossing ship.



Increasing speeds of ships and planes, and greater gun ranges, have caused continuous improvement of the Computer which today automatically solves the problems outlined above. However, even though the Computer works marvels, its operation depends on trained and skilled Navy personnel. It is a credit to our Navy that the equipment and personnel were ready when the need arose.



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were ready long before the war came. Our Armed Forces had foreseen the need for such instruments, and had worked with Sperry Corporation to develop them. Today, they are working hand in hand to constantly improve Sperry instruments.

When Victory comes, Sperry will continue to co-operate with our Armed Services. We shall also apply to peacetime pursuits the technical skill and knowledge gained in more than 30 years.

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And surely he'll be able to help you plan a postwar office layout that will work as sweetly as a P-38. Meanwhile Art Metal's Mr. Expediter is at your service. No fee; no obligation. Get his "Manual of Desk Drawer Layout". It will be an eye opener. Simply call your local Art Metal branch or dealer, or write Art Metal Construction Co., Jamestown, New York.

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SYSTEMATIZED EQUIPMENT AND RECORDS FOR BUSINESS

committees, such as Sen. Harry S. Truman's, dug out evidence of fraud.

• **Unit Prepares Cases**—Any government agency that receives a complaint is supposed to turn it over to the War Frauds Unit. The headquarters staff of the unit goes over the information, then passes it along to one of the field offices, which supervises the investigation and reports back to Washington when it is finished. U. S. attorneys usually handle the trials, but the War Frauds Unit works up the cases and sometimes assigns its own man to handle a complicated presentation.

One of the problems the War Frauds Unit faces is deciding whether a contractor actually has committed a fraud, or whether he simply has been misled by employees who were trying to make a record. Many cases of inferior workmanship have been traced to assembly lines where workers cut corners to keep up with tough schedules. Unrealistic specifications and ambiguous instructions also are troublesome.

• **Padded Payrolls**—In the clear-cut cases, however, there isn't much question about the contractor's responsibility. Officials have found that the most common case involves padding claims or inflating costs. About 45% of all the cases fall in this category.

A typical case was a ship repair concern recently convicted of filing false expense accounts, fictitious salaries, and padded bills.

In another case, partners in a manufacturing company allegedly ran up fraudulent claims of \$200,000 by padding payrolls, charging private expenses to the government, and charging up wages of employees on nonpaid vacation.

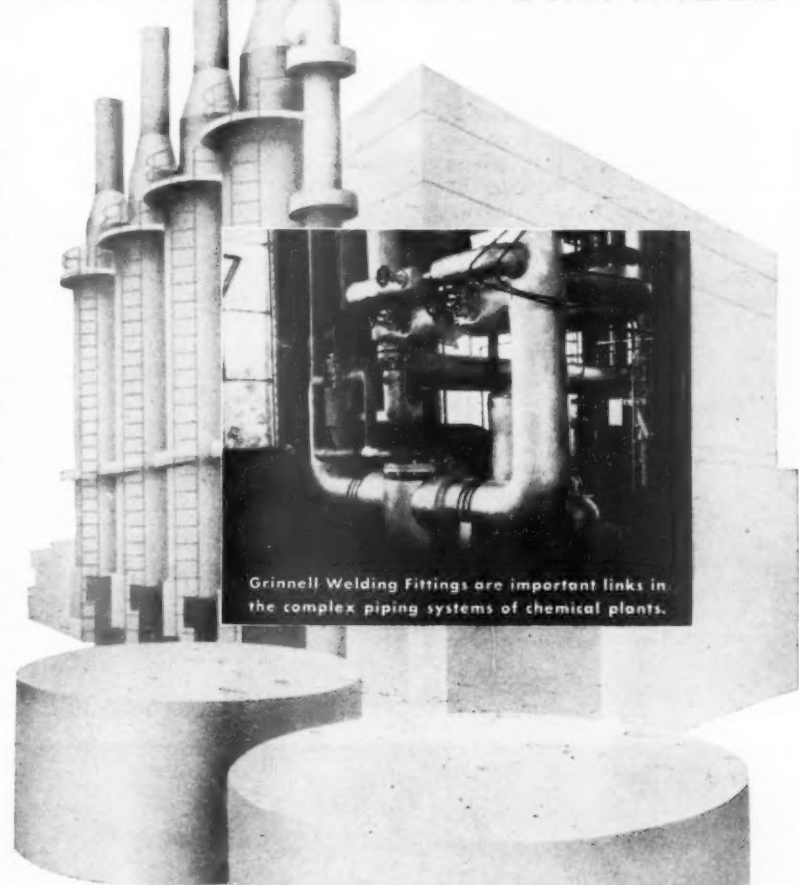
• **When They Get Tough**—Bribery cases, frequently involving inspectors, also account for a fairly high proportion of the indictments. One official estimates that about 25% of all cases have a bribery angle. Other typical offenses are violation of the orders of government agencies with fraud as the purpose, and intentional delivery of defective materials. Both the Justice Dept. and the courts are particularly tough in defective materials cases because of the danger to Army and Navy personnel.

• **Legal Difficulties**—In civil suits to recover damages, the government is just beginning to get out from behind a peculiar legal eight ball which existed from the time of the Civil War until 1943. The false claims act, passed in 1863, subjects a person convicted of fraud against the government to a penalty of \$2,000 for each act of fraud plus twice the amount of the damages.

In its original form, the act also entitled any citizen to bring suit in the name of the government and collect

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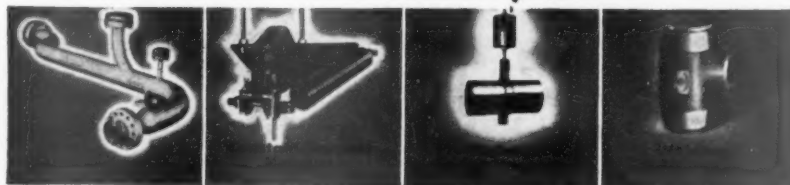
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half the recovery for himself. For this reason, it was called the informer act.

• **Ruling on Test Case**—Until early last year, lawyers considered the penalties of the informer act punitive rather than remedial, which led to the conclusion that the government could not bring both a criminal suit and a civil suit for damages under the informer act.

Then, the Supreme Court suddenly ruled in a test case (Marcus v. Hess) that both actions could be brought without prejudice to each other. (Its reasoning was that in most cases only part of the damages resulting from fraud can be proved, hence that double damages are merely compensation, not punishment.)

• **Act Is Amended**—The immediate consequence was a rash of suits brought by informers, many of whom simply copied details out of criminal indictments obtained by the government (BW—Aug. 21'43, p. 29). To stop this, the Justice Dept. set up the War Frauds Civil Unit which took over the job of bringing damage suits under the false claims act.

In December, 1943, Congress passed an amendment to the act, giving the government the right to take over all pending informer suits as well as any that might be brought in the future.

• **Informers Protest**—Since the amendment also trimmed down the informer's reward from 50% of the award to an amount not over 10% in cases where the government intervenes, informers resisted as soon as the Frauds Unit entered their cases. The Justice Dept. now is fighting several cases through the courts in an attempt to establish its right to take over.

Altogether, about 130 civil suits, including informer suits, are pending. Several have been settled out of court, but none has gone to trial since the question of government intervention arose.

Where Brewster?

Aircraft industry awaits indication of course to be taken by plane firm as a result of U.S. contract termination.

Termination of the Navy's fighter plane contract with Brewster Aeronautical Corp. makes this company the first privately owned aircraft plant to be cleaned out of war work, and industry leaders are watching the possible results with interest.

• **Not Unexpected**—Whatever plans Brewster might be considering to put into effect July 1, effective date of the cancellation, it appeared that any new production program must contemplate

other kinds of war work, because the plants are equipped for metalworking and metals are not yet available for non-war production.

At midweek company and union officials were reported to be conferring in Washington in an attempt to prevent a mass layoff. At the Long Island City plant, the management and 5,000 Brewster workers agreed upon a three-day holiday which began at noon Wednesday.

Selection of Brewster to bear the brunt of the Navy's plans for the reduction of fighter plane production was not unexpected in view of the fact that the company is the smallest producer of Navy fighters, and that relations between the Navy and Brewster have had a long, trying history, involving strikes, management changes, and a plant seizure, all of which combine to make a dismal record.

● **Production Costs Cited**—The Navy order canceling its contract with Brewster noted that the company has no other Navy contract or any prospects of any, and in addition, production costs were said to be higher than at either of the other two companies producing Corsair fighters—Chance Vought division of United Aircraft Corp., and Goodyear Aircraft.

While the Navy cancellation order brought protests from Brewster officials, the Navy pointed out it would be inefficient to parcel out curtailed Corsair production program among three companies. Back of this is the fact that Goodyear has other Navy contracts in addition to those for the Corsair,

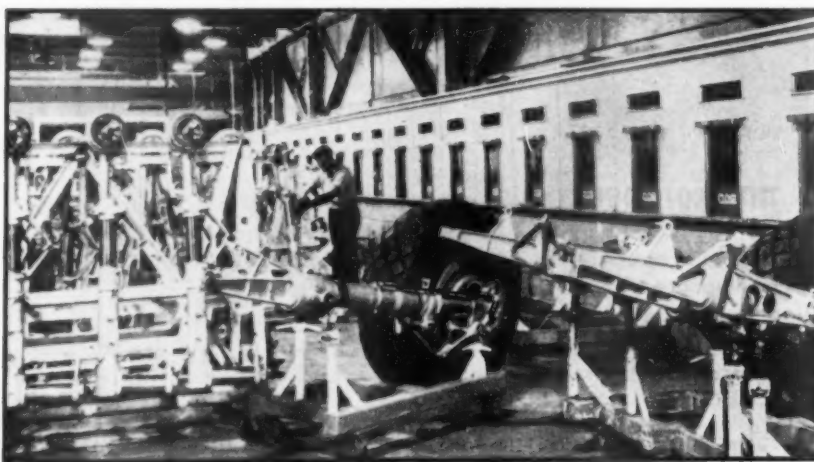
and Chance Vought was the designer and developer of the Corsair and presently is developing several advanced and special performance versions of this successful warplane.

● **No Blame on Kaiser**—In announcing termination, the Navy said there was no dissatisfaction either with the management of Henry J. Kaiser, who untangled the labor and production difficulties last year that had prompted a congressional investigation, or with the new management which has just taken office.

The Navy announcement about a week ago that it was curtailing its fighter production was a forerunner of the Brewster cancellation. Losses in fighter planes have been under estimates. The cutback, however, will not result in any over-all reduction in the Navy's 1944 goal of 37,000 planes in the air arm. The Navy said the cutback program would result in a saving of \$180,000,000.

● **Brewster Protests**—Preston Lockwood, new head of Brewster, termed the Navy action "inconsistent with sound termination procedure and most unjust to the company's 12,250 employees and its nearly 3,000 stockholders." He added that the management is not satisfied, either, that the cancellation is wise from the standpoint of the best utilization of manpower or effective prosecution of the war.

In addition to the 750-plane reduction at Brewster, production at Chance Vought and Goodyear will be somewhat curtailed but not eliminated.



TEMPORARY PLANT

Bombers and fighters are in production at Hollywood Park race track, but the sport of kings must be served; so North American Aviation will have to find other quarters before the new racing season opens Sept. 1. The novel

plant is an assembly center for B-25 Mitchell bombers and P-51B Mustang fighters fabricated at Inglewood, Calif. The concourse to which bang-tail bettors flock with their money is only one of several track buildings temporarily housing the firm's overflowing production facilities.

Fishermen Balk

Join cannery workers in refusal to make trip to Alaska aboard Liberty ships. U. S. yields and provides other vessels.

The Liberty ship, which has been blamed for a lot of things, will be spared any blame if the 1944 salmon pack runs light, although until last week it was being groomed for a villainous role.

● **Workers Balk**—In preparation for the salmon fishing season in Alaska, the 74 canneries which are operating under the government's enforced concentration program (BW—Mar. 13'43, p. 18) wanted to shift their staffs of fishermen and cannery workers from Seattle to the scene of operations.

The drawback was that the transfer was to be made in Liberty ships. Individually and through their unions the workers made it clear that if Liberty ships were the only conveyances, the salmon could wriggle unmolested in Alaskan waters until their fins froze.

● **Government Yields**—Cannery and government officials argued that if the Liberty ships were good enough for American merchantmen, sailors, and soldiers, they were good enough for American fishermen. But this didn't erase the fishermen's vision, induced by newspaper accounts of Liberty ships that allegedly fell apart at sea, of an untimely end in a watery grave. So they simply said no, and meant it.

Last week the government and cannery people capitulated. Liberty ships were ruled out, and the War Shipping Administration and the Army agreed to help the canneries round up enough non-Liberty ships to carry the workers to Alaska in time for the opening of the salmon season on June 25. The first contingent sailed from Seattle immediately.

● **Land Defends Vessels**—The revolt against the Liberty ship upset the Maritime Commission, which is proud of the performance and safety record of this all-welded vessel. Adm. Emory S. Land declared this week that only six Liberties cracked up during a period in which seven riveted ships collapsed.

Truman committee figures substantiate this. But they also show that of the 1,917 Liberty ships afloat last February, 62 had developed cracks that made them unsafe, 126 had cracks that could become dangerous, and 46 resulted in local failures.

● **Manpower Ample**—With the transportation hurdle cleared, the canneries seem confident of duplicating this year their 1943 pack of 5,300,000 cases of

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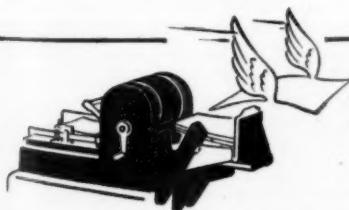
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salmon before the season closes about Sept. 15. They operate in four fishing grounds—the Columbia River (starting May 1), Alaska, the Fraser River in British Columbia, and Puget Sound.

Although the industry draws its manpower from one of the most acute labor shortage areas in the United States, labor supply is not expected to be much of a problem. Experienced fishermen and cannery workers have an arrangement with the war plants in that area whereby they are freed from their war jobs in fishing season, and the war plants recruit vacationing students and teachers during their absence.

• **Pack Pooled and Prorated**—Under the concentration program inaugurated last year by Fisheries Coordinator Harold S. Ickes, with the approval of most of the industry, only the 79 most efficient canneries (of a total of about 120) are permitted to continue in operation. The pack is pooled and prorated among the entire 120 so that each is enabled to "pack" his proportionate share under his own label.

Prices this year are unchanged. The gross ceilings per case set by OPA are: Reds, \$15; Pinks, \$8; Cohoes, \$12; Chums, \$7.60. The government takes 55% of the pack for military and lend-lease distribution, leaving 45% for civilians.

• **Halibut Strike Ended**—A second threat to the 1944 seafood supply was dissolved last week when the halibut fishing fleet of 1,200 fishermen and 180 vessels at Seattle abandoned their month-long strike against OPA's revision of ceiling prices (BW—Apr. 29'44, p. 53).

To restore the traditional price differential of 2½¢ a lb. which it had upset with its 1943 uniform ceilings, OPA this year cut to 15¢ the price which U. S. wholesalers may pay at Prince Rupert, B. C., for No. 1 sizes of halibut. The price at Seattle was allowed to remain at 17½¢ in hope that this would induce the fleet to make the longer haul from the fishing banks and thus bolster the supply of halibut in markets supplied by Seattle.

• **Survey Planned**—When the season opened Apr. 16, the Seattle fleet just didn't bother to put out. The fishermen and vessel owners didn't object to the 2½¢ differential; but they suggested that it could have been achieved by raising the Seattle price instead of lowering, in cooperation with Canadian authorities, the Prince Rupert ceiling.

The compromise finally put over last week by OPA is that a survey of production and distribution costs will be made, while the fleet is at work, as a basis for further consideration of prices. The fishermen wanted to hold out for a guarantee, but they backed down at mention of the antitrust laws.

Florida Pay-off

Humble expects \$50,000 reward for discovery well but plans to give money to state colleges. Leasing is active.

Humble Oil Co. now figures on collecting the \$50,000 reward and free oil leases on 40,000 acres of Florida land for bringing in that state's first commercial oil well.

• **Money Going Back**—Humble, a Standard Oil Co. (N. J.) subsidiary, announced it would give the \$50,000 right back to Florida, dividing the money between the state university and Florida State College for Women for scholarship funds. When the bonus leases are received, Humble announced, these institutions will get another \$5,000 each.

Trustees of the state internal improvement fund made up of cabinet members, final judges in the reward the legislature authorized in 1939, are expected to confirm State Attorney General Tom Watson's opinion that the money legally can be paid.

• **Flowing Well**—This action will be based on a company claim that its discovery well—drilling of which is estimated to have cost about \$450,000—has produced 10,000 bbl. of oil since last October, and is now flowing at the rate of 40 bbl. daily. A second well about two miles from the Humble producer, Sunniland No. 1, in the Everglades, has "a showing of heavy black oil."

Florida hesitated to pay the reward because Sunniland No. 1 reportedly produced 83.7% to 88% salt water.

• **Interest Kept Alive**—Thus, the search for real oil wealth in Florida has not yet reached its goal. Wildcatters have been drilling in Florida, off and on, since 1903. They have put down 53 nonproducers, but they kept on because in almost every instance there was a showing of oil.

East Texas and Louisiana discoveries, in areas having formations that resembled the geological structures in Florida, also kept interest alive.

In 1934, William F. Blanchard, a Miami oil engineer, called a conference of major oil company representatives to present data on Florida oil prospects. Soon new exploratory leases were signed, and 5,000,000 acres had been leased by 1937. But interest lagged again, and by 1939 the legislature responded to urgings of the oil interests by enacting the \$50,000 reward legislation.

• **Initial Claim**—Sunniland No. 1, first well to lay claim to the reward, was spudded in March 1, 1943. It began to flow oil at 11,627 feet, about the same



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For more than 40 years Armco has used precision research to create and improve steels for *special purpose* jobs — helping manufacturers to anticipate potential markets and to meet these with more durable, attractive and readily salable products.

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And our studies of markets, present and potential, may be of assistance to your sales organization. Why not discuss your post-war plans with us? The American Rolling Mill Company, 1941 Curtis Street, Middletown, Ohio.

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depth at which the second Humble test has found a showing of oil.

Indicative of the feverish development in Florida has been the activity of major oil companies which have signed leases wholesale. This has led to charges of an attempt to monopolize the potential Florida field, with allegations that at least one independent struck oil in an exploratory well, capped and sealed it, and then announced failure.

• **Charges Denied**—The operator, it is alleged, then bought up leases throughout the section, subsequently bargained with a major oil company, and sold out—profitably. These charges were denied by the oil company and also by the original development company.

It was pointed out that capping and sealing are necessary even in dry wells as a safeguard against injury to persons or animals who might stumble into an uncapped opening.

• **Coastal Leases**—Records in the state land office disclose that even submerged land off the Florida coast, along the Gulf and west coast of the state and inside the Keys almost to Biscayne Bay has been leased to three operators, Arnold Explorations, Inc., Florida Land & Exploration Co., and William Blanchard.

Pipeline Studied

Expected duration of the Pacific war may be determining factor in proposal to pipe Texas oil to the West Coast.

The way government officials decide a heated controversy over merits of a proposed \$47,000,000 pipeline between west Texas oil fields and the West Coast, in the opinion of some oil men, may indicate whether these officials expect a long war in the Pacific or a short one.

• **The Yardstick**—Presumably, the Petroleum Administration for War and the War Production Board will approve or disapprove the materials and manpower for such a pipeline strictly on the basis of its value as a war measure.

Opponents of the line, including major oil companies operating in California, pursue this logic in contending that construction would require too long—ten or twelve months.

• **Backed by Independents**—Sponsor of the line is Pacific War Emergency Pipelines, Inc., which represents a group of independent Texas oil operators. President of the company is Angus G. Wynne of Dallas, who also is head of American Liberty Oil Co.

Obviously, the independents contend,

"One way to save more money is by making more money to save"

ECONOMY was the topic, and the boss was giving all of the benefit of his views in a bulletin on first principles.

opened up with some plain facts about newspapers — "circulation is the seal of public approval — the only way to get and keep dominant circulation by the merits of your paper" — things like that.

He counseled us "never economize on your product" — on our processes, yes, on our product never — "efficiency is the best economy."



When he wound up with the line which disclosed his whole philosophy and which turpented us into action: "One way to save more money is by making more money to save."

It was years ago that this bulletin went out, but we think its viewpoint expresses a policy which America and the American people would do well to ponder now as we make ready to face the future.

When this war is over, we shall stand on the threshold of the greatest era in our people we have ever known, and we have sense enough and energy

enough to make it come real.

We'll have to work to get it, but the makings of it are surely there, and we shall work more fruitfully if we keep before us the image of what we are trying to do and the best way to do it.

That is where the serviceable newspaper comes in — to define for its readers in clear outline the image which shall inspire and guide them — to provide trustworthy news of the facts, trends, events and actions in the world which justify their hopes and endeavors.

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If it is authentic interpretation of events or trustworthy editorial counsel they want, they look to Hearst Newspapers first.

If it is features, newspictures, cartoons, columnists' comment, society, sports or business news they want, they look to Hearst Newspapers first.

There is a lesson here which no sensible advertiser with an eye on the future will ignore.

It is simply that in planning marketing programs to reach these people, he should look to Hearst Newspapers first, as do they.

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Evening and Sunday
DETROIT TIMES
Evening and Sunday
LOS ANGELES EXAMINER
Morning and Sunday
LOS ANGELES HERALD-EXPRESS
Evening
MILWAUKEE SENTINEL
Morning and Sunday

NEW YORK JOURNAL-AMERICAN
Evening and Sunday
NEW YORK MIRROR
Morning and Sunday
OAKLAND POST-ENQUIRER
Evening
PITTSBURGH SUN-TELEGRAPH
Evening and Sunday

SAN ANTONIO LIGHT
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Products for the World of Electronics

STUPAKOFF CERAMIC AND MANUFACTURING CO. LATROBE, PA.

west Texas needs and will continue to need new markets for its burgeoning oil fields. California, producing crude oil of its own at the rate of 300,000,000 bbl. a year, last month withdrew 3,800,000 bbl. from storage in order to keep its refineries running full blast.

• **Tankers Cheaper**—West Coast oil companies, some of which produce oil in west Texas, contend that the steel that the proposed line would require could be used to better wartime advantage in drilling new wells; that tanker transportation would be infinitely cheaper; and that there is no evidence to indicate any postwar oil shortage on the West Coast.

Oil men who are not directly involved in the controversy have a lively interest in the outcome as a possible factor in future competition for domestic markets.

• **How About Rates?**—Although Pacific War Emergency Pipelines spokesmen have insisted that their project is strictly a war job, outsiders suggest the possibility that this company, as a private enterprise, might be able to obtain a fairly generous wartime schedule of rates from the Interstate Commerce Commission and amortize the project quickly.

If the proposed 20-in. line, running 936 miles from west Texas to Los Angeles, carried 200,000 bbl. daily at 50¢ a bbl., these outsiders calculate, its daily gross would be \$100,000, and net perhaps \$50,000. At this rate, full operation for three years would pay for the line, and anything beyond that would be profit.

INDIANS GET OIL MONEY

Each of the 2,382 Shoshone and Arapahoe Indians on the Wind River Reservation in Wyoming will receive \$46.30 for granting oil rights on 654 sq. mi. of their land, about one-fifth of the reservation.

The government last week leased the drilling rights to the Kerlyn Oil Co. of Oklahoma City, Okla., composed of Gov. Robert S. Kerr of Oklahoma and associates, for \$110,300, a higher bid than those offered by Carter Oil Co., Stanolind Oil & Gas Co., the Texas Co., or Sinclair Wyoming Oil Co. The lease gives Kerlyn the right to select 10,240 acres for production leasing without further bonus bidding. The Indians will receive royalty on every barrel of oil produced.

If Kerlyn finds rich production in the Tensleep sands, the Wind River Indians may rival the Osages of Oklahoma in oil wealth some day. Kerlyn plans to start drilling at once, but the company will have to sink its wells at least one mile away from any of the five small producing wells on the reservation.

GAS OASIS DRIES UP

Matamoros, Mexico, and other Mexican towns along the Rio Grande across from Texas have placed a ban on gasoline sales to automobiles bearing U. S. licenses.

Americans along the border (and tourists) have been crossing the river to fill up with Mexican gasoline. In many instances they paid a premium above the price charged natives with the result that many Mexican filling stations have been running short and Mexican cars have had to get along with reduced supplies or none at all.

Co-op Mine Fold

Exhaustion of anthracite in old Natalie shaft leaves the workers holding the bag. A ray of hope remains.

Modern machinery and a modern breaker, plus loyal, cooperating employees who owned stock and sat on the board of directors, were not enough to save the Colonial Collieries Co. mines, which were among the old liabilities of the anthracite region in Pennsylvania.

• **Premium Anthracite**—Pinching out veins and strippings, inability to lease further land from larger operators to buy sufficient coal from independent who could sell all they could mine led to the closing of the 50-year-old Natalie mines midway between Mt. Carmel and Shamokin.

The closing of Natalie, a remnant of the now bankrupt but once strong Madeira, Hill & Co. chain, and long one of the better producers of a low content premium coal, with a yearly output of over 600,000 tons, was a heart breaker to the 600 miners still on the payrolls.

• **Co-op Formed**—The miners had poured \$225,000 of their wages into the mine five years ago when Colonial started on the financial failure path that had snared Madeira, Hill two years before.

When the Madeira chain had gone through reorganization under the bankruptcy laws, Colonial had been exempt but in 1939, it, too, went into the hands of receivers, under direction of the Northumberland County Court.

A cooperative was formed, with miners paying 10% of their wages in bonds, and three United Mine Workers



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It's a day coach. Looks pretty nice, doesn't it? And it is nice! Light, bright, roomy and comfortably air-conditioned. Smooth riding at high speeds with pillow-soft seats that fairly invite you to sink down and relax—wide windows that provide a sweeping view of the scenic landscape—and dozens of important little travel conveniences. • Where will you find such coaches as this? Many of them were built before the war began and are now in use. Hundreds more had been planned but never built—you know the reason why. • We haven't

been able to use scarce materials and man power to build trains as we'd like to have them. There's a war to win and we're doing our level best to meet the nation's wartime transportation needs. • But we offer this little glimpse of the future because we want you to know, when you ride on our trains today, that railroads are looking ahead, planning for better trains for tomorrow.

**ASSOCIATION OF
AMERICAN RAILROADS**
ALL UNITED FOR VICTORY

members were placed on the board of directors, along with three company officials, three area businessmen, and a representative of debtors who were issued stock.

• **Employees' Credit**—Two payments amounting to 35% of the bonds have been made, leaving a debt to the employees of \$122,000 plus an estimated \$18,000 in retroactive pay and \$30,000 in vacation pay.

Daily output of the mine formerly ran about 3,000 tons, with half of that in domestic sizes. Since 1942, it had dropped to 1,800 tons daily.

• **Three Veins**—The mine property lay over several of the minor veins of the region, the Lykens, the Red Ash, and the White Ash. Supplies were drawn from three mines, the Natalie, the Greenough, and No. 9. Each added some particular quality to the mixture which resulted when all were thrown in together at the breaker.

This breaker, using the Chance system of grading and cleaning, blended the coal, which was of two degrees of hardness, into a premium coal, the demand for which could not be met.

When price ceilings were put on anthracite, high operating costs put the Natalie over the barrel, and the Solid Fuels Administration permitted two price concessions adding 65¢ to the ceilings.

• **Help in View?**—Community cooperation may yet aid Colonial. The Shamokin-Coal Twp. Chamber of Commerce had been working for months to bring

about reopening of the nearby Big Mountain colliery, abandoned several years ago. The Standard Coal Mining & Converters Corp. of Chicago has been interested in Big Mountain but was faced with a \$137,000 bill for back school taxes owed to Coal Twp.

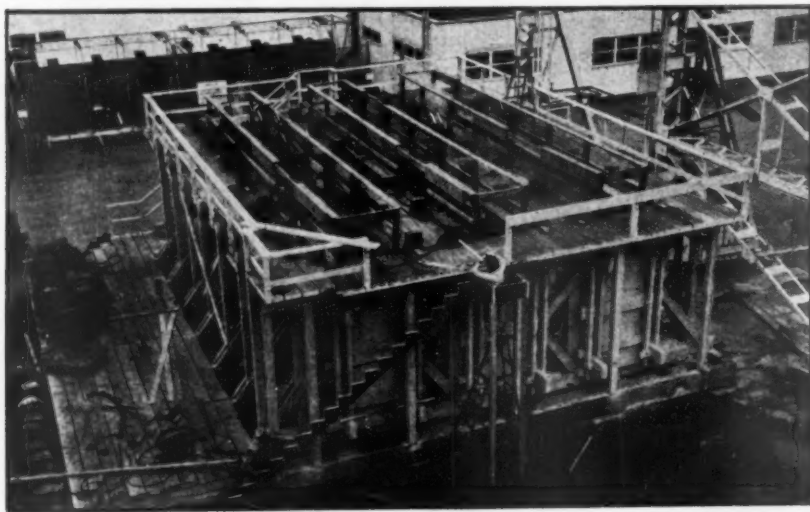
On the assumption that the board has nothing to lose and everything to gain through operation by Standard, the township board has agreed to forgive these taxes, with the approval of four state agencies which assist the schools in time of need. Court approval also is being sought.

Standard will install pumps at once to dewater the mine so that its engineers can determine if Big Mountain can be worked profitably.

• **Would Use Breaker**—Under the plan, Standard would pay \$15,000 in taxes, including \$8,400 to Coal Twp., and take over 735 acres of Big Mountain property. The remainder of the property, 504 acres, would revert to Northumberland County.

If Big Mountain starts producing, Colonial is expected to benefit through operation of its breaker, and in addition, efforts are being made to bring Colonial and Standard together for discussion.

In the meantime, the Solid Fuels Administration has arranged for Colonial dealers, who received 261,700 tons in 1942-43, to be supplied by 13 other producers who ordinarily could not take over another producers' clients, in an effort to distribute equitably the available supply of anthracite.



BATH TUBS FOR STEEL

Timesavers in shipbuilding are the three new 5,000-gal. vats which pickle plates at Henry J. Kaiser's yards at Vancouver, Wash. Mirror-clean surfaces are provided by them in an

eight-hour process during which the steel is run through an 8% sulphuric acid solution, followed by dips in neutralizing and rinsing baths. Plates are then ready for installation and rust-proof paint—without sandblasting operations formerly employed.

Steel at Retail

Postwar trend toward more fabrication, own marketing seen accelerated by industry's experiences during the war.

War-time operations took the stage at the American Iron & Steel Institute's annual meeting in New York this week, but plans and anxiety for the postwar future were visible, if not publicly audible, in the background.

• **Fabrication by Producers**—Limited to members only, the institute's discussions emphasized wartime technical problems and de-emphasized long-range planning. Meanwhile every steel man present was keeping his eyes and ears open for hints on what his competitors and his customers have in mind for the future.

Woven into the steel industry's long-range plans and guesswork are an apparent trend toward fabrication of steel by the metal producers themselves, a somewhat parallel trend toward direct marketing organizations aimed at the ultimate consumer, steel-making capacity that has been expanded beyond what the industry considers "normal," a frozen price situation, and rising labor costs.

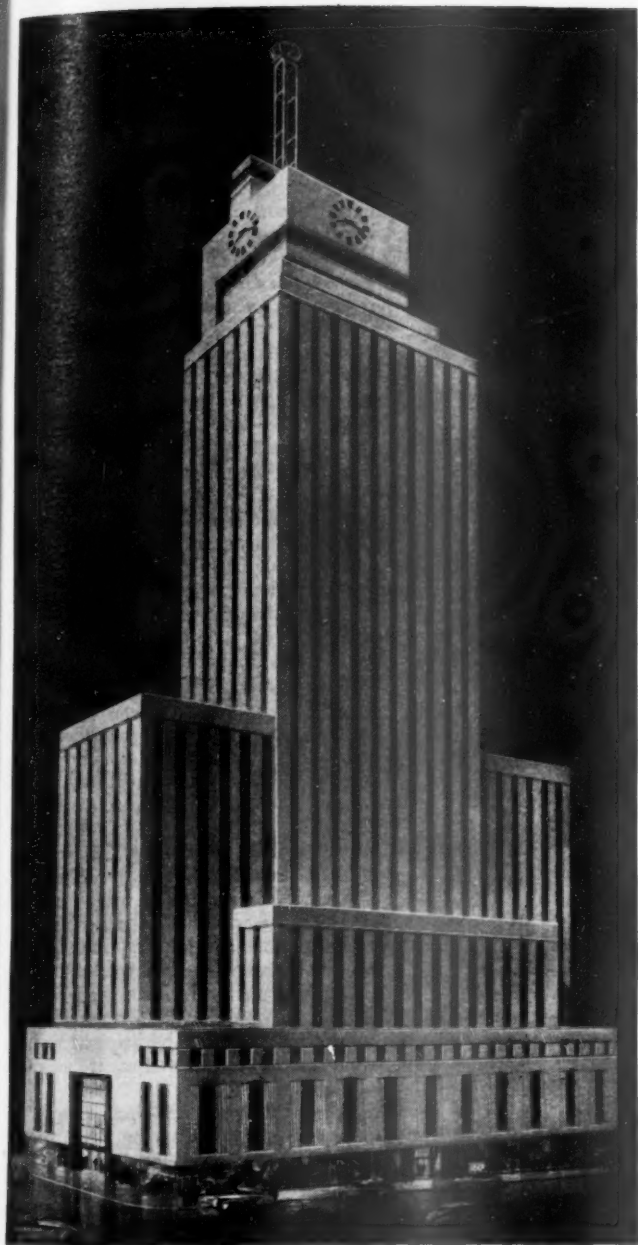
• **Ponderous Problems**—High point of the meeting, however, was built on the industry's war production achievements. It was an award, for the first time since 1935 to any individual, of the Elbert H. Gary memorial medal to Quincey Bent, vice-president of Bethlehem Steel Co. (page 44).

Financial rewards, rather than medals, are in store for steel men who can balance expanded productive capacity, a wartime achievement, with expanded marketing capacity, a postwar dream.

Steel marketing problems are both ponderous and complicated—ponderous because of the enormous productive capacity to be kept busy (total employment of the steel companies is about 1,000,000 and the industry invests about \$11,500 for each man employed); complicated because steel mills make about 3,000 different products which in turn are the raw materials for hundreds of thousands, if not millions, of different manufactured items.

• **A Trend Accelerated**—The trend toward steel company fabrication of its own metal is no wartime phenomenon. It began about 20 years ago. It has been accelerated by the war in that the war brought new demands for fabrication of steel into bombs, shells, ship parts, and related goods which the steel companies met.

On the other hand, many steel men



"City in the Sky"--the Mercantile Bank Building, Dallas, Texas. Youngstown Pipe used for plumbing, heating and air-conditioning. Architect, Walter W. Ahlschlager, general contractor, Henger Construction Co., plumbing sub-contractor, C. Wallace Plumbing Co.--all of Dallas.

YOUNGSTOWN

THE YOUNGSTOWN SHEET AND TUBE COMPANY

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Manufacturers of

Carbon, Alloy and Yaloy Steels



If Dallas depended on this Egyptian Chain of Pots

THE citizens of Dallas take justifiable pride in this new skyscraper... the 30-story Mercantile Bank Building.

Yet who appreciates that this "City in the Sky" was possible only because of the availability of modern piping systems--the only practical means to service every floor of its magnificent 30 stories with water.

Imagine what this building, housing thousands of workers, would be like with no water or modern heating facilities. Picture the impossibility of this structure in Ancient Egypt, dependent on the then ultra-convenient chain of earthenware pots to draw water from wells.

In order to live in cities, civilized men must have water close at hand... and to have water we must have dependable pipe... pipe low enough in cost so that it can be used plentifully, pipe durable enough that it will withstand the ravages of time and the hardships of extraordinary service. Steel pipe is the answer to all of these requirements.

The architect who specified Youngstown Pipe for this job and the contractor who bought and installed it, know of its enviable record in other outstanding installations.

Pipe and Tubular Products - Sheets - Plates - Conduit - Bars - Coke Tin Plate - Electrolytic Tin Plate - Rods - Wire - Nails - Tie Plates and Spikes.



TARGETS FOR TOMORROW!

In Heat Treating... Plant executives everywhere, still hard at work on the industrial front, are finding time to plan their future objectives—what they will do when Uncle Sam says "GO" in the race for conversion.

They've learned plenty these past three years. They've accomplished the impossible—but tomorrow's targets will be just as tough to hit, in the future battles of competition where economy and speed must be in liaison.

In heat treating departments the lessons learned with war-time steels will be applied, as tank links become tractor parts, or as A. P. shot contracts change to automotive work again.

As in the days of change-over to a fighting nation, Houghton heat treating service and Houghton salts, carburizers and quenching oils will be ready at your call. The same oils that were the answer to proper hardening of lean alloy steels... the salt baths that streamlined war production... the carburizing compounds that toughened tanks and armor plate... and above all, the individual technical aid that plant men found so vitally helpful, will be yours to command.

E. F. HOUGHTON & CO.
303 W. Lehigh Ave., Phila. 33, Pa.

INDUSTRIAL OILS
AND LEATHERS

point out that most of this wartime fabrication will be a dead letter when the war ends, and a few executives contend that the war has hindered, rather than accelerated, any trend toward steel companies' fabricating goods for the ultimate consumer.

Although it is generally agreed that a trend toward company fabrication is developing, most top executives are reluctant to divulge their own plans.

• **Danger in New Markets**—And there is another vital consideration. Each steel maker must balance his desire for new markets against the danger of alienating customers by competing with them for the consumer's dollar.

It is the same problem, essentially, that is faced by every manufacturer or wholesaler who is tempted to keep up or expand his volume of business by acquiring retail outlets.

In pondering the profit-making possibilities of fabrication, many a steel man has mentally drawn comparisons and contrasts between the making of steel and the making of automobiles.

There is about a ton of steel in the average passenger automobile, plus another half ton of iron castings, glass, rubber, upholstery and padding, wood framing, plastic gadgets, and nonferrous metals. Steel in this automobile nets its producer less than \$100, delivered, but the car itself, at the auto manufacturer's door, is priced at \$600 to \$2,000.

• **Eye Auto Parts**—No steel company contemplates making automobiles, but several may, within the next few years, begin to make the simpler kinds of automobile parts.

The reason is that even simple fabrication adds several dollars a ton to the selling price of steel. Multiplied by hundreds of thousands of tons, it can make a vital difference.

• **Barrels and Houses**—Steel barrels are one example illustrating the prewar trend. Several years ago the fabrication of large steel containers was left to several independent fabricators. Today, this line is dominated by steel companies through various fabricating subsidiaries.

United States Steel Corp. moved further into prefabricated housing this month with acquisition of a controlling interest in Gunnison Housing Corp. (BW—Apr. 29 '44, p19), announcing its belief that prefabs "should become one of the world's greatest industries." This, of course, is the long-range view; for the immediate future, outsiders concluded that U. S. Steel had purchased Gunnison for its value as a laboratory in testing out applications of steel subassemblies, and for its marketing and manufacturing verve and experience.

• **U. S. Steel's Groundwork**—By any standard, U. S. Steel has been a major

For Constant Reference

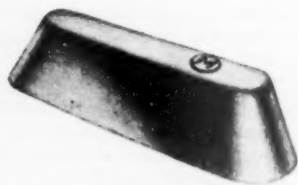
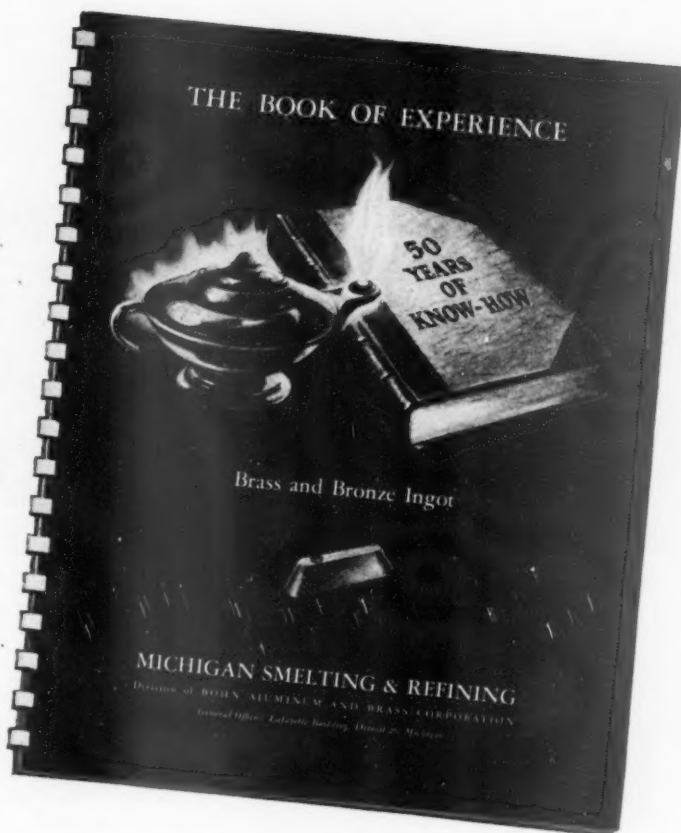
"The Book of Experience"

This new Michigan Smelting booklet is in fact a history of the entire development of the use of brass and bronze ingot in industry. It covers the steps from ingot metal in its crudest form to the present day, when scrap metal is refined to very definite specifications.

The manner in which Michigan Smelting ingot is made is described in detail. We show why you can always bank on getting accurate analysis ingot when you use this company as your source of supply.

Listed for constant reference are specifications of the various alloys in daily use.

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Bethlehem's Bent Wins Gary Medal



Quincy Bent, Bethlehem Steel Corp. vice-president in charge of steel-making operations, research, and development, this week was awarded the steel industry's highest honor, the Elbert H. Gary memorial medal (page 40).

• **Pushed Leaner Alloys**—Bent is a steel man's steel man. He is the kind of boss who knows his men and speaks their language. It was Quincy Bent, the American Iron & Steel Institute's awards committee agreed unanimously, who was mainly responsible for putting across the national emergency (leaner alloy) steels (BW—Jun. 27 '42, p. 79) which in turn made possible the present high level of war production in this country, in the face of early shortages of the alloying metals.

And it was Quincy Bent, the awards committee found, who headed a committee of practical steel operating men who finally whipped the emergency wartime steel expansion program into workable shape early in 1942 after it had bogged down in a mountain of paper work and industry-government conflicts in Washington.

Bent's committee went straight down a line marked out by two considerations: the need for steel, and the facilities available. Competitive factors were ruled out.

• **In Steel Since 1901**—Bent was born in Steelton, Pa., July 28, 1879, and went to work in a steel mill right after he was graduated from Williams College in 1901. He has been working in steel mills ever since.

When Bethlehem bought Pennsylvania Steel Co. in 1916 for nearly \$32,000,000, some steel men thought the price was away out of line. One of them asked "Charlie" Schwab, then boss of Bethlehem, why he had paid so much for that kind of steel-making equipment.

"We got Quincy Bent, didn't we?" was Schwab's answer.

This year's award of the Gary medal is the first such award in nine years. In 1935, the steel institute presented it to John B. Tytus, vice-president of American Rolling Mills Co., for his work in devising the continuous process of rolling steel, now used in all high-speed steel rolling operations.

fabricator ever since it was organized in 1901.

Its American Steel & Wire Co. was a consolidation of several wire companies and steel makers. United States Steel Products Corp. is the consolidation of several subsidiary fabricators, which, after the war, may be expected to make consumer goods. Prewar advertising laid the groundwork for consumer acceptance of the "U.S.S." label; a postwar selling organization designed to bring the company into closer contact with the buying public also would be a logical development.

Prewar fabricating activities of U. S. Steel included various kinds of wire, pipe and tubing, fencing, freight cars, oil well supplies, ships, and bridges.

• **Bethlehem and Ships**—Second largest steel company is Bethlehem Steel Corp., which claims also to be the world's largest ship builder. So intimately are its operations tied up with shipbuilding that OPA, in making studies of steel production costs, decided it would be impractical to try to separate Bethlehem's steel and shipbuilding expenses, and concluded that about two-thirds of Bethlehem's revenue was derived from its role as a shipbuilder.

Most of this shipbuilding activity, the industry agrees, will cease when the war ends. What Bethlehem will do with the productive capacity thus released has not been announced, but it is known that its executives have been thinking in terms of postwar construction and reconstruction. Bethlehem is a major fabricator of steel structures, including bridges.

• **Republic's Role**—Republic Steel Corp., third largest in the industry, banks heavily on the diversification of products represented by its Berger, Niles Steel Products, Truscon, and Upson divisions.

These subsidiaries make light steel building materials, spouting, cabinet work, sheet metal products, office furniture, containers, bolts and nuts, steel structures and exterior steel, screen, and window frames.

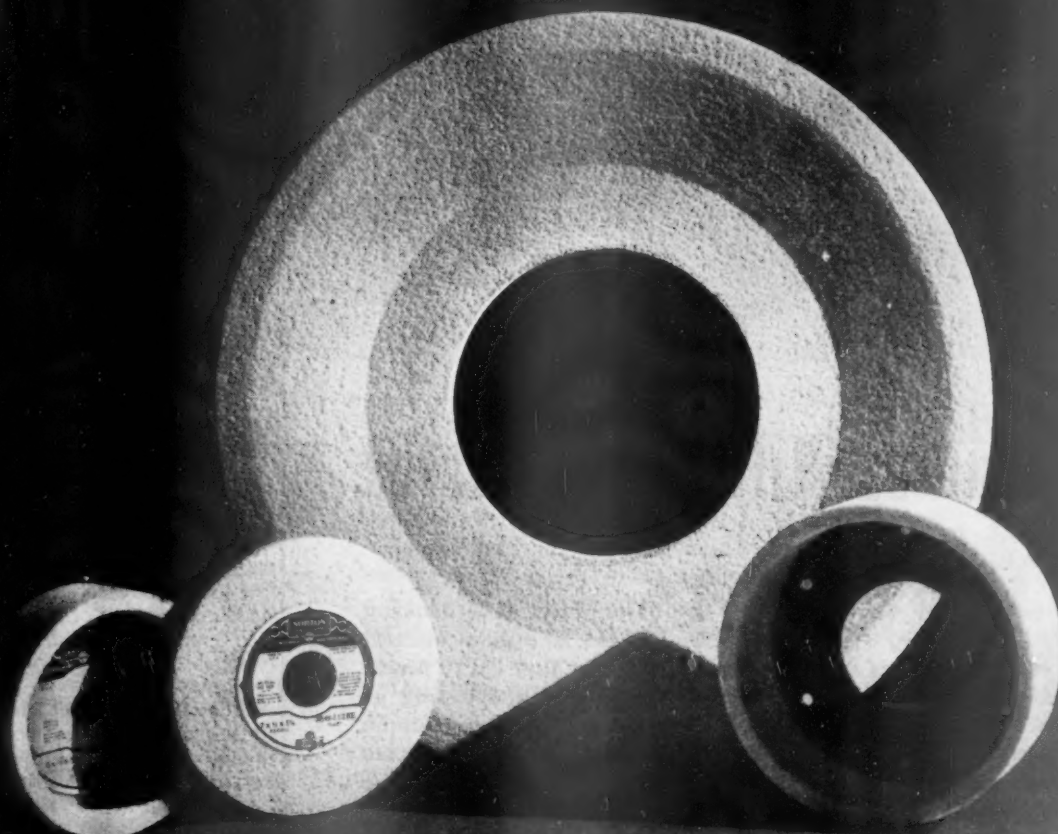
• **Mills and Pipe**—Jones & Laughlin Steel Corp., which fabricates a variety of structural steel, mill and factory buildings, containers, and "junior beams," is not expected to enter prefabricated housing, but, like many other steel companies, it may concentrate on selling steel stairs, steel structural members for houses, and steel flooring.

Youngstown Sheet & Tube Co. fabricates a line of iron and steel products and oil well supplies. Inland Steel Co., contrary to fabrication trend, is reported to be negotiating for the sale of one of its fabricating subsidiaries.

American Rolling Mills Co., long the dominant factor in iron and steel drain-

NORTON OPEN STRUCTURE GRINDING WHEELS

... Up to 24" Diameter Now



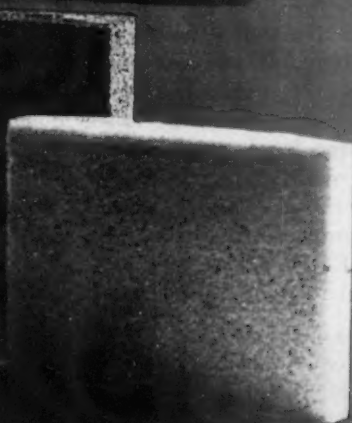
Industry now need not be handicapped by size limitations on grinding jobs that require open structure wheels—where the contact is broad—where the stock removal is especially heavy—where extra coolness of cut is essential.

Norton Open Structure Wheels are being supplied as large as 24" diameter by 4" wide and 20" diameter by 6" wide—and, of course, in all the usual tool room and surface grinding sizes and shapes, including segments.

Norton Open Structure Grinding Wheels and segments are **uniform**—the same grinding action every time—a result of the Norton Controlled Structure process of manufacture.

NORTON COMPANY, Worcester 6, Mass.

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Leading Millions of Horses to Water

The power of a thousand horses in a giant aircraft engine is always available because they are first led to water. Clayton Dynamometers have revolutionized the testing of new, rebuilt and overhauled engines, through their unique method of harnessing water to provide laboratory-accurate measurement of horse power. Now it is practical to determine the condition of every engine.

All types of internal combustion engines are now tested on Clayton Hydraulic Dynamometers. Light-weight self-controlled equipment checks tanks and trucks overseas... production plant models test marine diesels, engines for tanks, aircraft power plants. Clayton Dynamometers are built with a minimum of critical materials, are simple to operate and greatly reduce the cost and bulk of testing equipment. The complete line includes models from 50 to 4000 hp. capacity. After the war, they will again be available to improve performance of automotive and industrial power plants.

Other Clayton products serving the Armed Forces are Kerrick Kleaners... Kerrick Cleaning Compounds... Clayton Steam Generators... Clayton Boring Bars and Bar Holders, and Clayton Hydraulic Liquid Control Valves

CLAYTON
MANUFACTURING CO.



ALHAMBRA
CALIFORNIA

age products, such as pipe and fittings, like Republic has been in and out of prefabricated housing. Arms executives have been studying the potential market for farm buildings exclusive of housing, for structural steel in housing and industry, and of steel for new industries.

• **Steel Huts on Farms**—National Steel Co., one of the top five or six producers, has been assembling the nucleus of a postwar marketing organization in its Stran Steel division, Detroit, from which it expects great things in the steel building business of the future.

The major producer of military Quonset huts, Stran Steel hopes to popularize this type of inexpensive, easily erected building for farm and warehouse purposes.

• **Marketing Studied**—The list of fabricators could be extended to include practically all steel producers. Wheeling Steel, whose aggressive advertising may set an example for other members of the industry, is a major factor in such products as galvanized roofing, and galvanized containers including garbage pails. Crucible Steel specializes in alloy forgings; Wickwire Spencer in wire products; Alan Wood in steel flooring, and so on.

The industry as a whole is becoming more conscious of its marketing problems.

From U. S. Steel down, it has begun to think in terms of steel products that will appeal to the public, of marketing research and sales all the way to the ultimate consumer.

• **Alloy Steel vs. Light Metals**—When a steel man talks of "over expansion," he usually is thinking of alloy steel capacity, particularly of electric furnace steel.

The steel companies are set up to produce a maximum of about 15,000,000 tons of alloy steel a year, out of total rated capacity of about 94,000,000 tons.

One of the industry's major problems after the war may be to create new markets for alloy steel, in competition with the light metals, plastics, plywood, and other materials. The steel producers think this can be accomplished by new design, by utilizing newly gained knowledge of cheaper alloys, and by exploiting the advantages of stainless steel in such expanding industries as rayon and nylon. The competition of light metals, it is held, is now aimed chiefly at cast iron rather than steel.

• **More Cutbacks**—Electric furnace capacity projected to cost \$140,000,000 has been cut back, and there is talk of additional cutbacks. Alloy steel production last year was approximately 13,000,000 tons, against prewar production of around 3,000,000. Alloy production last reported was at the annual rate of about 11,000,000 tons.

More Telephones

WPB approves production of 800,000 handsets, but only essential users to get them. Pacific Coast to come first.

To meet the practical famine in telephones, the War Production Board is permitting limited resumption of manufacture of civilian handsets at a rate of 200,000 a quarter beginning July 1. The famine has been growing since manufacture was stopped in November, 1942, and now is causing denial of service to essential users.

• **Big Share to Bell**—Of the new sets, 80% will go to the Bell System, 20% to independent companies, which operate mainly in small cities and rural districts.

WPB authorities and industry officials emphasize that none of the new sets will be available to the public until fall.

• **To Move Plant**—Resumption of civilian telephone manufacturing—sought by the industry for over a year—was made possible by the decision of Western Electric Co., which will supply the Bell System quota, to move its handset equipment operations from its Hawthorne plant in Chicago to a leased factory in St. Paul which is a noncritical labor area.

Chicago is a Group I critical labor area, and the Hawthorne plant is engaged virtually 100% in military production.

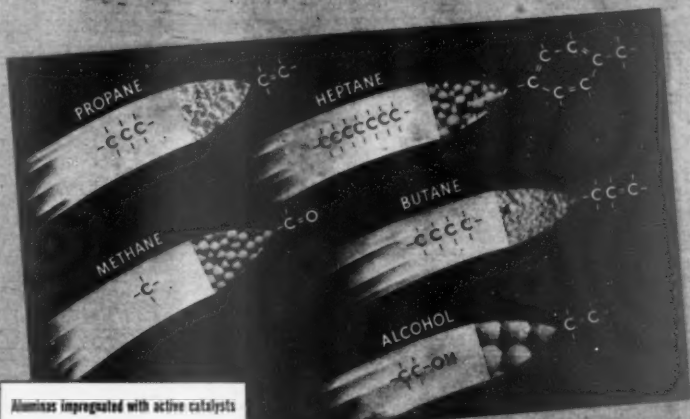
• **Pressure Eases**—The cord for the civilian handsets will be made at the Point Breeze (Md.) plant of Western Electric, likewise up to the hilt in military production and in a Group I labor area, but Western Electric previously relieved the pressure on its Baltimore works by leasing an aircraft piston plant at Scranton, Pa., from the Defense Plant Corp.

The remaining 20% of the sets (40,000 a quarter) for the independent telephone companies will be allocated among five manufacturers serving that field at a meeting in Washington June 1.

The five manufacturers are Automatic Electric Co. and Kellogg Switchboard & Supply Co., both in Chicago, a critical labor area, but both companies have had recent sharp cutbacks in military production; Stromberg-Carlson in Rochester, N. Y., a Group II area; Leitch Electric in Genoa, Ill.; and North Electric Mfg. Co. in Galion, Ohio, the latter two noncritical labor areas.

• **May Be Speeded**—Manufacture of the sets will start in the third quarter, and, while that quarter may not attain the

ALUMINAS are two way spark-plugs for catalytic reactions



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2. Lower operating temperatures.
3. Reduce side reactions and poisoning of catalyst.
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Catalytic reactions carried on with the aid of Alorco Aluminas are playing an important part in vital wartime production. Explosives, high octane gasoline, synthetic rubber and plastics are all being produced in greater quantities, therefore, faster.

Serving as catalysts, carriers and auxiliary catalysts are the various forms of Alorco Aluminas described in the box below. Aluminas have extremely large surface areas. They are strong and stable. Aluminas are pure, so there is less likelihood of side reactions and poisoning.

Certain catalytic reactions move faster when dry gases or organic liquids are used. This is the *second way* Alorco Aluminas are at work. Machines charged with Alorco Activated Aluminas dry gases and organic liquids automatically, efficiently, to low dew points.

Samples of any of these materials will be sent to you for trial. Write ALUMINUM COMPANY OF AMERICA (Sales Agent for ALUMINUM ORE COMPANY) 1935 Gulf Building, Pittsburgh 19, Pa.

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ACTIVE TYPES

Activated Aluminas... These Aluminas are catalytically active material when used alone or as catalyst supports. The pores of the granules occupy 50% of the particle volume.

Hydrated Alumina C-730... This Alumina is active after an original heating to 500°F. It has finer particles and greater surface area than are obtainable with ground natural materials.

INACTIVE TYPES

Tabular Aluminas... These Aluminas have a range of porosity and are a form of granular corundum produced from pure aluminum oxide. They are highly resistant to abrasion and are unaffected by high temperatures.

Monohydrated Alumina D-50... This is a substantially inactive powdered Alumina having crystal structure different from the usual Aluminum Trihydrate. The average particles are 1 micron in diameter.

ALUMINUM ORE COMPANY



Aluminum and Fluorine Compounds



In Meeting the Demands of War **Gaylord Is Developing Finer** **Containers for Peace**

Packages and containers for War materiel must stand up under conditions far removed from peacetime uses. Extremes of temperature, of climate, of moisture, and of handling methods have had to be met and overcome.

As a result, new Gaylord developments mean new and better containers for *your* postwar products—finer in every way—greater sales appeal, and better protection for your product.

BUY MORE WAR BONDS

GAYLORD CONTAINER CORPORATION **General Offices: SAINT LOUIS**

CORRUGATED AND SOLID FIBRE BOXES... FOLDING CARTONS
KRAFT GROCERY BAGS AND SACKS... KRAFT PAPER AND SPECIALTIES

New York • Chicago • San Francisco • Atlanta • New Orleans • Seattle
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Weslaco • St. Louis • Hamden • San Antonio

200,000 figure, the fourth quarter is expected to make up the difference. WPB and industry authorities expect that production quotas can be stepped up by the beginning of 1945, but this will depend on the progress of the war.

The Pacific Coast area, where military and civilian requirements are most urgent, will be the first to receive the new instruments. Regions with other acute war needs will be next in line for distribution. There will be no general distribution of the new instruments until all installations essential to the war effort are made.

● **Many Appeals**—There are approximately 1,250,000 unfilled orders for telephone installations, of which nearly 500,000 cannot be filled because of lack of sets. The remainder are held up both by the shortage of instruments and by limited switchboard and plant capacity. Today WPB is receiving about 2,000 appeals a week for telephone installations and is having to reject a large percentage even though the applicants are qualified for service under WPB Limitation Order U-2.

Western Electric's St. Paul plant will absorb around 2,000 workers at peak production. St. Paul at present, according to the War Manpower Commission, has 2,500 to 2,800 unemployed.

WINDFALL FOR ARMY

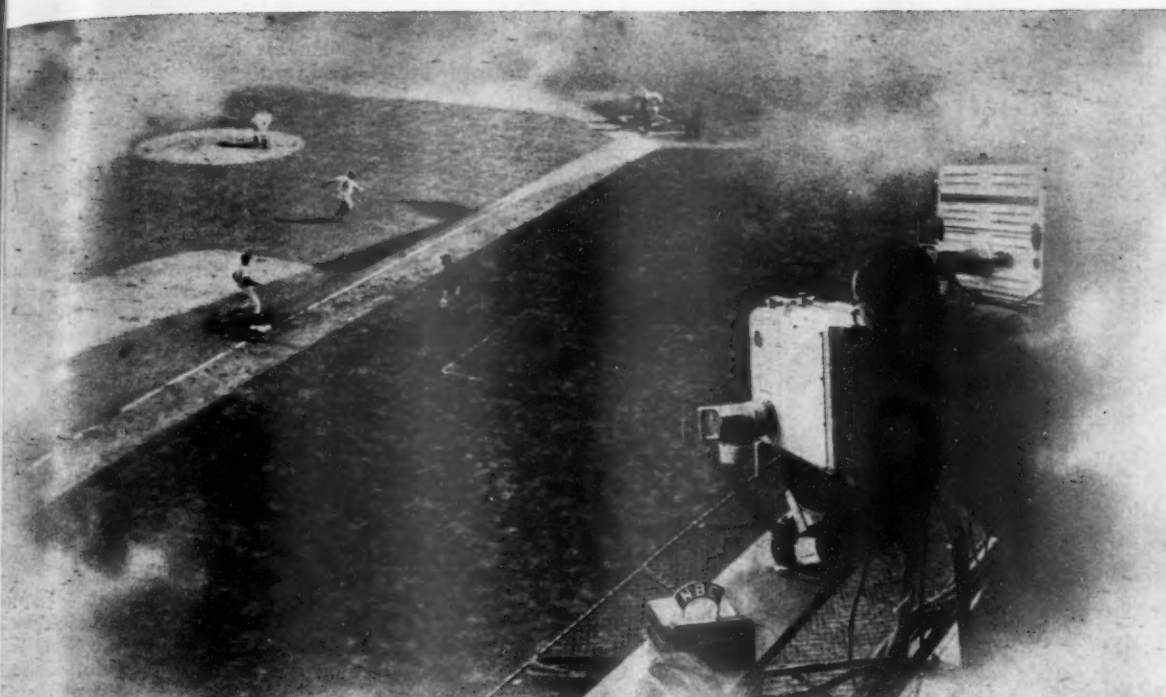
When Western Union absorbed Postal Telegraph, the consolidation gave the Army a windfall in the form of tele-types and other relay center equipment that speeded simplification of its communications network.

Elimination of duplicated circuits, reduction of personnel, and greater use of automatic transmitters already have resulted in economies of \$1,500,000 a year, the Signal Corps announces. Within six months \$3,000,000 a year additional savings will be effected as the unification progresses.

The Army's network of leased circuits has 16 major relay centers, but, at present, they serve only 349 of a total number of 2,200 installations in this country. The network connects with nine major overseas theaters. There's no guess as to how many millions of words a day flow over it, but it includes 100,000 words daily from the Navy plus more from the State Dept. and the Red Cross.

When completed, the simplified network will have 28 relay centers in the U. S., and the number of installations will be reduced to 1,600.

It is doubtful that teleprinters released by the program will permit any expansion of civilian installations as the Bell System's pool of critical equipment is still so small that only essential users can get any.



NEW VISIONS for Tomorrow's World

● IT DOESN'T MATTER NOW whether clouds hide the sun, or whether evening shadows fall on the baseball diamond. If the fans in the grandstand see the game so can the modern television camera.

That was not always so; the pre-war television "eye" needed as much sunshine as it could get to illuminate the scene. The same was true of football—final quarters were occasionally "washed out" on the television screen.

But thanks to research, conducted at the RCA Laboratories, a new super-sensitive television camera, rivaling the human eye in its ability to see under

conditions of poor light is in prospect for the post-war world. Then, by television you will see every last-minute play of the ball game as clearly as if you were in the stands. Entertainment, sports, news events will pass before your eyes with every detail, every shadow faithfully reproduced.

Today, RCA's research facilities are devoted to providing the fighting forces of the United Nations with the best radio and electronic equipment available. Tomorrow, these same skills will continue to serve America in developing and creating new and finer peacetime products.



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HEIN-WERNER HYDRAULIC JACKS

of 3 to 30 tons capacity
make it easier for men to

- Lift Heavy Loads
- Move Machines
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Check the situation in your plant. Chances are that a lot of jobs can be done quicker and easier through the use of Hein-Werner Hydraulic Jacks.

Available in models of 3, 5, 8, 12, 20 and 30 tons capacity...For details, consult your nearest industrial supply distributor, or write us.

HEIN-WERNER MOTOR PARTS CORP.
Waukesha, Wisconsin

Battle for Olives

Canners are caught in a squeeze as olive oil blenders' bids raise on-tree prices from \$74 a ton in 1940 to \$164.

Caught in the rising tide of raw fruit prices, processors of canned olives and olive oil have bumped against the Office of Price Administration's finished-products ceilings.

Still suffering from the headaches of last year's crop season, the packers of ripe olives have been meeting in Los Angeles and Fresno to seek a solution for the squeeze—a rise in average on-tree prices from \$75 a ton in 1940 to \$164 this season.

• **Blenders Seek Crop**—The California packers' problems have been complicated by the spirited bidding by olive oil processors, or blenders as they are commonly known, for the 1944 crop.

Prewar olive oil came predominantly from Spain. In 1940, edible olive oil imports amounted to over 50,000,000 lb., but this was not pure olive oil. It was a blend of sesame seed, cottonseed, and other oils. But it was the product to which the American palate had become accustomed. And this is the product which blenders, many of them centered in the Brooklyn (N. Y.) area, are manufacturing in large quantities to the discomfort of the ripe olive packers.

ties to the discomfort of the ripe olive packers.

• **Packers Puzzled**—In direct competition for the raw fruit, the blenders during the last season frequently outbid the ripe olive canners, sometimes paying as high as \$200 a ton. How they can do this when they have an OPA ceiling of \$4.75 a gal. for top quality oil is something the canners would like to know.

Packers figure that the blenders would have to get their olives at \$155 a ton to break even; yet the average for the 1943-1944 season was said to be \$160.

• **No Violations Found**—The ripe olive packers fear that such bidding ultimately will close them out, although their pack for the current year far exceeds last year's—an estimated 1,000,000 cases (48 one-pint containers) compared with 752,000 cases. OPA has denied this group increases in their individually set ceilings.

At the packers' request, OPA made an investigation of alleged violations by blenders of price regulations but found no direct violations. But California packers suspect that some of the many olive oil blends appearing on the market are shy of olive oil.

• **Growers Warned**—Olive growing is predominantly concentrated in Tulare County of California's Central Valley. Through the farmers' own cooperative the Lindsay Ripe Olive Co. of Lindsay, Calif., a leading marketer of ripe olives



SHAVINGS SAVE COAL

A portable loader that operates like a vacuum cleaner sucks up wood shavings which save Atlanta, Ga., \$7,000 yearly in fuel and labor for the city's incinerators. The residue, donated by Williams Bros. Lumber Co., is burned

in place of 27 carloads of coal formerly needed during summer months to consume vegetable refuse high in moisture content. Designed by a city official, the loading machine transfers the free fuel to a 10,000-lb. hopper from which trucks are loaded for haul to the big garbage burners.

Beyond a shadow of a DOUBT!



In inspection operations there is no way of gaging the consequences of doubt . . . but there's one sure way of gaging beyond a shadow of a doubt!

That method is with the use of **Jones & Lamson Optical Comparators**, projection machines for measuring and comparing objects by means of a magnified shadow.

They measure angles in degrees and minutes; lead or spacing; height or depth . . . They photograph the enlarged shadow, without the need of a dark-room . . . They compare objects with a master outline . . . They permit rapid inspection and measurement of the many forms that are difficult or even impossible to inspect by direct gaging.

Any man or woman with a few minutes of instruction can operate this machine with speed and precision—a matter of particular importance in these days of manpower shortage.

There's an experienced Jones & Lamson Inspection Engineer near you. Call, write or wire for this service to Jones & Lamson Machine Company, Springfield, Vermont.

For rapid, economical inspection . . . BEYOND A SHADOW OF A DOUBT!

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FACT OR FICTION?

A 47-second test on the Main Street of the Northwest



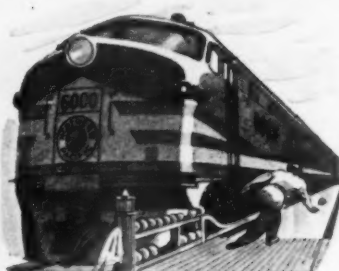
Q. Northwest sheep play vital role in paper manufacture. Fact or fiction?

A. Fact. Wool from Romney, Cotswold, Lincoln sheep makes block-long felts used in paper-making. In 1943, N. P. carried 22,234,000 lbs. of wool.



Q. Recent Oregon gold rush has built new city of 37,000. Fact or fiction?

A. Fiction. Not gold, but shipyards, created Vanport City—in 16 months! Second largest city in Oregon, it is on the "Main Street of the Northwest".



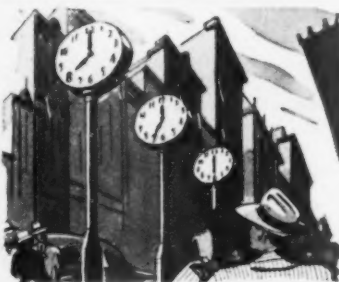
Q. Monster Diesel locomotive, now hauling N. P. freight, is longer than three bowling alleys. Fact or fiction?

A. Fact. It's 193 feet long, built in four articulated sections. Northern Pacific has ordered 11 of these giants.



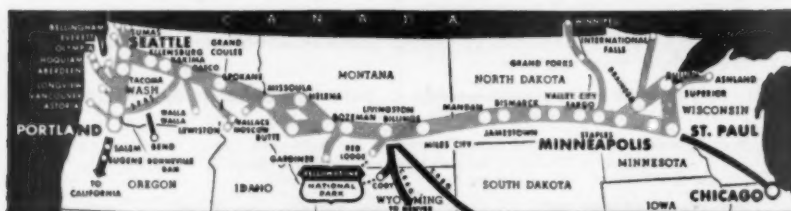
Q. Blizzards notwithstanding, spuds from Minn.-N. D. Red River Valley are dug in February. Fact or fiction?

A. Fact. But from Dixie's soil. Certified seed for southern growers is precious part of N. P.'s potato tonnage.



Q. Three kinds of time are used on one American "Main Street". Fact or fiction?

A. Fact. The Northern Pacific Railway operates in Central, Mountain and Pacific time zones . . . It's the 1904-mile "Main Street of the Northwest".



NORTHERN PACIFIC

MAIN STREET OF THE NORTHWEST

and by the arguments of the private packers, olive growers are warned that they must not desert the ripe olive industry—even when it is more profitable to sell to the blenders.

The canners point to the fact that after the last war the first shipment of Mediterranean olive oil brought prices down from \$8 a gal. to \$1 a gal. They argue that this may happen again—perhaps long before the end of this war, if the U. S. works out an arrangement with Spain. The canners also point to a five-year comparison of average prices paid to olive growers by the two groups:

	Ripe Olive Canners	Oil Pressers
1939-1940	\$93	\$42
1940-1941	\$93	\$70
1941-1942	\$167	\$145
1942-1943	\$125	\$120
1943-1944	\$174	\$160

At \$42, olives sent to the pressers would be only those too mangled, pitted, or small to be useful for any other purpose. This in normal times is an unimportant market. The reason: In peacetime the pressers face the enormous Mediterranean competition. But the ripe olive packers, boosters of their American product, feel they are fighting not only for their own survival but also for the survival of the industry.

Gas Cut Sticks

Circuit court upholds "gate rate" reduction ordered for natural gas companies in Rocky Mountains area.

The U. S. Circuit Court of Appeals at Denver last week upheld the Federal Power Commission in a two-year-old order that slashed \$2,086,000 net from the "gate rates" of natural gas pipeline companies serving distributors in the Rockies, from the Texas Panhandle to Cheyenne, Wyo.

• **Theory Is Upheld**—The case was one of the first decided by the commission on the "prudent investment" theory of the late Justice Louis Brandeis. The Supreme Court since has upheld other rate-making valuations computed under this theory when the companies cannot prove them confiscatory.

Companies involved in the ruling are the Canadian River Gas Co., which delivers the gas from the field at Clayton, N. M.; Colorado Interstate Gas Co., which delivers it at the "gates" to distributing companies; and Colorado Wyoming Gas Co., which takes the gas into Wyoming.

• **Substantial Reduction**—Domestic consumers will get most of the benefit. At

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The ancient tools of the trade are not enough

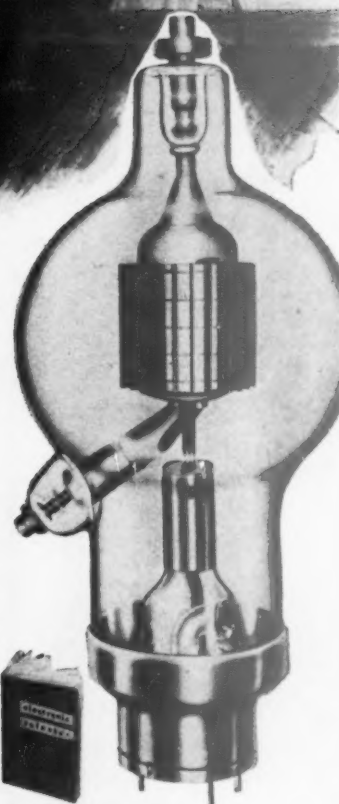
To compete with metals and new synthetic materials, the wood industry needs but to adopt a new "set of tools" and employ mass production techniques. This fact has been proven by the wood industry itself as, for example, is indicated by the all-wood airplanes of today: The "plastic plywood" plane is an example of what can be done in mass-production. It proves that curved parts having great strength and uniformity can be made rapidly and economically of wood.

One of the limiting factors in achieving real mass-production of laminated wood products can be eliminated through the use of Electronic heating. To the wood industry as a whole, Electronic heating represents a new, *faster* means for gluing, bonding, drying and seasoning wood products. Through the use of this high temperature heating process, adhesives normally requiring 8 to 10 hours to set at room temperatures can be set in a matter of minutes. Thus bonding of plywoods whether into sheets or into complicated

shapes can be done on a mass-production basis. The advent of Electronic heating, by lifting this one limitation should do much for the future of the wood industries.

Eimac does not manufacture Electronic heating equipment. But Eimac does make its most important component... the electron vacuum tube. It is the vacuum tube that makes Electronic heating a reality. The dependability and performance capabilities of such equipment is a direct reflection of the quality of the vacuum tubes employed. It is imperative, therefore, that prospective users of this new heating method give vacuum tubes the most careful consideration.

Investigation will show you that Eimac tubes enjoy the enviable position of being first choice of leading Electronic Engineers throughout the world... first in the important new electronic developments... including Electronic heating... a position which was attained upon merit alone.



Write for this Booklet
ELECTRONIC TUBES EIMAC 1500T

More than sixty pages fully illustrated. Written in language the laymen can understand. No cost or obligation.

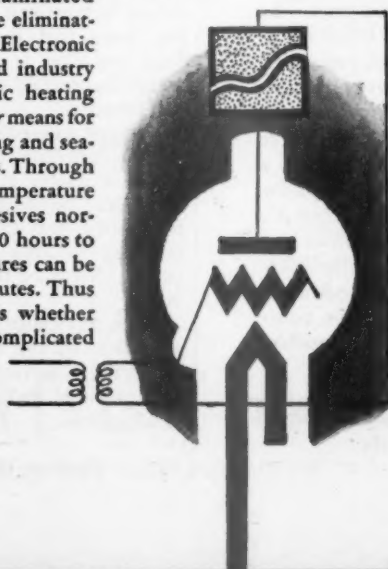
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LESS than one per service call meter..... per year!

That's the story of 1400 MI-CO Parking Meters installed in an eastern city. In one year only 1322 service calls were made for mechanical failure . . . *less than one call per meter per year.* The low cost of maintaining MI-CO Parking Meters is the result of unusually rugged construction, fewer moving parts, and many mechanical refinements. MI-CO Parking Meters are made to meet the requirements of a small village or a large city. Right now these meters are not available, but it's not too early to be thinking about and planning for the future. A fully illustrated folder, "MI-CO Parking Meters Offer Many Advantages" gives complete details. Send for a copy today.

MI-CO METER CORPORATION, 231 Court St., COVINGTON, KY.

Manufactured under the patents of F. L. Michaels
by The Michaels Art Bronze Co., Inc.

Denver, the largest domestic market, the average gate rate is 36.5¢ per 1,000 ft. which the commission order would reduce to about 21¢. Present Denver domestic retail rates begin at \$1.85 for the first 1,000 ft. and average about 80¢.

Domestic consumers served by Public Service Co. of Colorado are slated to save approximately \$1,085,000 yearly, a cut which Denver's city government has promised will be effective.

In addition to the cuts for the companies serving the Rockies region, the commission ruled that rates to Natural Gas Pipeline Co. of America, serving Chicago and midwestern points, should be cut \$655,000 annually.

• **Big Jackpot**—Consumers also will hit the jackpot in retroactive reductions, for approximately \$4,185,000 has been piled up in escrow since the case was appealed.

POSTWAR CASH VOTED

Portland, Ore., has backed up with cold cash the vision of postwar employment outlined six months ago by Robert Moses, commissioner of New York City parks, in a survey of possible public works projects (BW—Nov. 20 '43, p27).

At the May 19 primary election, Portland voters overwhelmingly approved four of the projects Moses advocated as well as the \$24,000,000 needed to carry them forward.

The major project (\$12,000,000) will eliminate the dumping of sewage into the Willamette River by construction of a disposal plant. Other authorizations were: \$5,000,000 for new schools and equipment, \$4,000,000 for roads, \$3,000,000 for docks.

The projects are expected to provide jobs for 10,000 persons.

SOLDIER DEBT CANCELED

Men and women in the armed forces who had debts on the books of the Tide Water Associated Oil Co. of Los Angeles recently got a break. They received letters from the company informing them that their unpaid bills had been canceled as a token of the company's appreciation for their service to the country.

The oil company gave no publicity to the cancellation, although it represented a sizable gift. Tide Water does a national business, and the total debt forgiveness was estimated at \$75,000, covering perhaps 5,000 to 6,000 accounts. Many of the bills were for fuel oil.

Each serviceman's debt was canceled, regardless of the amount owed. With the debtors moving around in the services, payment and collection had proved troublesome.



Thrives on emergencies!

On the alert whenever disaster strikes — in war or peace — are Coast Guard mobile emergency communications trucks.

They dash to stricken areas on the instant of summons, equipped for radio sending and receiving, and with great searchlights ready to signal planes or light the way for emergency night landings. Each truck is a little hospital, little weather station, "little town" on wheels.

And what supplies the power to expedite operations? *Kohler Electric Plants*. Each mobile unit has one — and the current for powerful lights, for short-wave transmission, for many other instant services springs from its Kohler plant.

One more example of Kohler Electric Plants in action, plants for regular, emergency, or auxiliary use — for *any* need. Kohler Co. production today is devoted to the arming of our forces on the ground, in the air, on and under the sea. Kohler Co., Kohler, Wisconsin.

• Kohler Electric Plant, model 1A21, 1500-watt A. C., shown in Coast Guard mobile communications truck, is run by a gasoline engine. It provides power for everything — radio equipment to lights.

★ BUY UNITED STATES WAR BONDS ★

KOHLER OF KOHLER

PLUMBING FIXTURES AND FITTINGS • HEATING EQUIPMENT • ELECTRIC PLANTS

Community Job

New Orleans must help Higgins Aircraft recruit 15,000 to 20,000 workers or face Group I labor classification.

For more than a year some residents of New Orleans looked upon the big Higgins airplane plant as a delayed action bomb which might never explode into action.

• **Faces Reclassification**—Last week the sprawling plant dropped a problem of blockbuster proportions into the New Orleans labor situation. It was ready to produce Commando planes (largest transport planes of the war), and New Orleans was confronted with the task of helping Higgins Aircraft, Inc., to recruit 15,000 to 20,000 workers or face the almost certain prospect of having the area, and its 700 manufacturing plants, placed in the Group I labor shortage classification with attendant nonrenewals and cancellations of existing contracts.

To the average man in New Orleans, the situation was a surprise. After a long chain of delays, in which the Army changed production plans and thus upset the starting schedule, many people had stopped wondering where the labor would come from if and when the plant went into production.

• **Lost Ship Contract**—Looking backward, New Orleans recalled that on July 18, 1942, the Maritime Commission suddenly canceled a contract with Higgins for 200 Liberty ships (BW-Jul.25'42,p5). A national uproar followed including a Truman committee investigation. The Maritime Commission and the National War Labor Board contended that a steel shortage motivated the cancellation.

Sept. 29, 1942, President Roosevelt visited the Higgins plants in New Orleans during his tour of war plants.

Undoubtedly impressed, he invited Andrew J. Higgins to visit him in Washington to discuss other plans for the temporarily abandoned shipyard. The President later stated that he had instructed the war agencies to find something that could be built on the Higgins site originally planned for Liberty ship construction.

• **Gets Plane Order**—On Oct. 30, 1942, Higgins received a plane contract for 1,200 Curtiss-Wright C-76 cargo planes, involving \$130,000,000. An additional \$30,000,000 was allocated through the Defense Plant Corp. for converting and equipping the shipyard as an airplane factory. One hour after the contract was actually signed on Jan. 13, 1943, work on plant construction began.

This, however, was not the end of the story. On Aug. 3, just as facilities for the C-76 wood plane were approaching completion, the War Dept. changed the contract from a wood to a metal plane—the larger Curtiss C-46 Commando. This involved another delay while production facilities were being changed.

• **Plant Is Completed**—On Oct. 24, 1943, just about a year after receiving the original plane contract, the plant finally was dedicated, and it was disclosed that the plant, in spite of delays and setbacks, had been built within the original estimate and was said to have cost less per square foot than any other plane plant in the U. S. It was also revealed as the largest plane plant in the world, with the exception of the Ford Willow Run plant, covering 45 acres under one roof, completely air-conditioned, and the only airplane plant in the Deep South which will handle the complete production operation.

By Jan. 1, 1944, though there were 5,000 employees on the payroll, gigantic twin-engined Commandos still were not rolling off the assembly lines. The public began to doubt the plant would ever produce planes.

• **Start Huge Airport**—On May 15, however, all doubt was removed. Ground

was broken on the Higgins Airport, the largest in the South, to accommodate the huge freight cars of the air as they come off the assembly line. This was the last step in construction.

Almost simultaneously the call went out for 15,000 to 20,000 additional men and women to bring the plant's production up to its capacity of 25,000 employees.

• **NWLB Gives Warning**—NWLB has warned New Orleans of the emergency, and has proposed a seven-point plan for averting the penalty of an acute labor shortage. These are (1) a drive to reduce labor turnover; (2) a drive to reduce absenteeism; (3) the application of the 48-hour week; (4) controlled referrals of all male workers; (5) relaxation of hiring specifications; (6) utilization of part-time workers; and (7) lending workers.

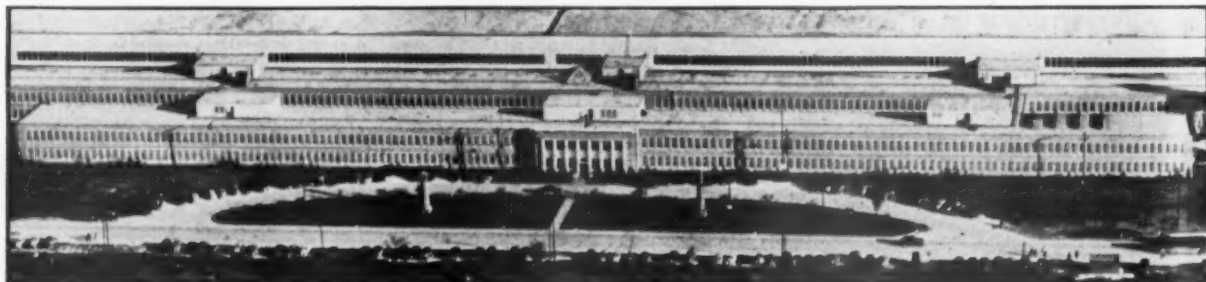
The need will be for common labor, of which New Orleans has a great reservoir in Negroes. It is a community objective now to divert them to the vital spots. And, civic organizations are mobilizing for the effort.

Attack on Rates

Michigan Supreme Court holds that utility charges are subject to review if company pays excess-profits taxes.

Far-reaching changes in utility rate structures may follow a Michigan Supreme Court decision that a utility's federal excess-profits taxes may be ignored and its rate structures reviewed.

• **Hearing Called**—The Michigan Public Service Commission previously has accepted the theory that excess-profits taxes were part of the cost of doing business. But the Supreme Court, ruling favorably on an effort of the city of Detroit to obtain PSC reduction hearings on electricity rates, held that the commission had discretion to



Sprawling over 45 acres, the completed Higgins Aircraft factory at New Orleans is reputed to be the nation's largest, second to one—Willow Run. In proportion to its size is New Orleans' problem of furnishing manpower—

15,000 to 20,000 workers—to put the plant into full production without plunging the area and its 700 war factories into a Group I (critical) labor shortage classification with a resultant loss of war contracts.

New!
Ozalid
Rapid Black

MARCH 1944

New! Ozalid Transblack

the first black-line, dry-developing intermediate paper

Until now, you've been using a sepia-line paper to produce "intermediate originals" of your engineering drawings.

For until now, no manufacturer in the field has been able to create a satisfactory *black line* intermediate.

Now, Ozalid proudly offers—OZALID TRANSBLACK... with all of these desirable characteristics:

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2. **Maximum Visual Density.** An Ozalid Transblack intermediate is easier to read and work on. Furthermore, since additions in pencil or pen *match the printed lines*, subsequent prints are more uniform than those produced from a sepia intermediate with black additions.
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5. **No Increase in Price.** Ozalid Transblack sells at the same price as sepia papers. Before ordering, however, send for a **FREE** sample package. A test in your machine will convince you of Transblack's superiority.

*OZALID RAPID BLACK IS RECOMMENDED for producing the best "work" prints from originals or intermediate originals.

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GENERAL ANILINE & FILM CORPORATION
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☐ Send a **FREE** sample package of OZALID TRANSBLACK for test purposes.

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OUT OF the welter of war will come many things of practical, usable value to post-war America. Now needed for victory, they will prove equally needful in the days to follow.

As in war, your arteries of transportation are destined to play a major role when America returns to its peaceful occupations. Freight cars will speed over the nation, within their sturdy walls the essentials to better living and increased happiness—essentials in the form of raw materials for manufacturers and processors—finished products for consumer outlets.

Freed from war duty, the ROCK ISLAND LINES will devote all of its equipment, rolling stock and personnel to peacetime effort. With the improvements that war has brought, plus the replacements available when fighting ceases, it will be the finest transportation service ROCK ISLAND can provide!

Of this be assured—the arteries of a new, free America will be ready whenever peace comes. Speed the day!

BUY MORE WAR BONDS

As yesterday—and today—so tomorrow
ROCK ISLAND'S sole purpose is to
provide the finest in transportation

ROCK ISLAND LINES



ONE OF AMERICA'S RAILROADS—ALL UNITED FOR VICTORY

exclude such taxes from the cost of business.

Immediately after the decision was announced, the commission summoned Michigan telephone, electric, and gas companies, 217 in all, to a hearing June 1. A general formula of reduction will be considered to side-step the need of a long series of rate hearings now and after the war ends.

• **Wide Interest in Case**—Major Detroit utilities reserved comment. Detroit Edison Co. pointed out that it had only a short time in which to review the Supreme Court action, and that a future course might be laid out meanwhile. This company paid \$10,711,000 in excess-profits taxes last year.

There was extreme interest in utility circles as to the effect of the state court action on the new Detroit gross-profits tax on utilities (BW—Mar. 4 '44, p. 99) which comes up for a court test shortly.

• **Might Nullify City Tax**—The Detroit tax was passed by the city commission in an effort to divert the amount of the federal excess-profits levy into municipal coffers. If the effect of the court decision is to reduce rates to the point that no excess-profits taxes are due, then the city gross tax would be nullified effectively.

This would please the utilities, but only for the moment. They would still face the larger worry of having their rates tied indirectly to whatever level Congress, by adjustment of the excess-profits tax, might declare excessive.

• **Other Action Reported**—The Michigan PSC stand, which brought about the court determination, was said by commission attorneys to be similar to the line taken by many other state commissions, although no other court tests have been reported.

During the last war, however, the West Virginia Supreme Court is said to have ruled on a parallel case in the same way.

CREDIT FOR CARTONS

Offer of a 5¢ credit for used cartons has enabled the Frank G. Shattuck Co., operators of Schrafft restaurants in several East Coast states, to salvage as high as 30% of the corrugated containers, in which customers' purchases of candies, cakes, or pastries had been packed.

All cartons now sent to Schrafft customers carry a bold, red sticker offering to pay the 5¢ refund plus return freight charges on 100-lb. lots. The stickers also carry instructions for removing staples and collapsing the cartons for easy packing.

At its main plant in Boston, Schrafft's sterilizes the containers, and an assembly line process removes old stencils and readies the boxes for re-use.

PRODUCTION

Freon Is Tighter

Output of the refrigerant is at peak, but the bulk of it is going to the services and to the railroads.

Although freon, the nontoxic, noninflammable, refrigerant gas, is now being produced at a record 3,200,000 lb. a month, there are going to be many public and commercial buildings without air conditioning this summer.

Normal leakage (10% to 30%) is expected to cripple the cooling systems of hotel rooms, stores, bowling alleys, bars, restaurants with F 12 freon systems which can't operate on charges of less than 80%. Some of the large centrifugal installations (such as theaters) run on carrene. They are lucky because carrene is not restricted now though it may be later. Carrene is F 11 in the freon family. Chemists know it by the jawbreaking name of trichloromonofluoromethane. The military is taking practically all of the gas. Railroads, however, will get all they've asked for.

• **Civilians Can't Get It**—Of the four kinds of freon, F 12 bulks largest and is most commonly used in air-conditioning units. F 12 is currently going into aerosol insecticide sprays (chiefly to control malaria), ship refrigeration, food preservation, and industrial refrigeration and vital air conditioning.

Last January WPB issued a list of civilian users who can get no deliveries. In addition to the establishments already mentioned, the list included auditoriums, rinks, night clubs, bus and railway stations, stores, and residences.

• **Needed in Research**—Then some users found that F 22, by slight changes in their equipment, could be used for space cooling. This started a rush that forced WPB to issue an order halting F 22 deliveries. It is needed for the low temperatures used in stratosphere research and for shrink fits of mechanical equipment used at high altitudes.

Methyl chloride, the only substitute for freon in installations designed therefore, isn't safe in public buildings and homes where it is most needed. It costs less than freon and is plentiful, but it is both toxic and explosive. In cooling plants where proper engineering and care can reduce these risks, methyl chloride may be used.

• **Two Considerations**—About 100 appeals a week are coming to WPB from

users who believe they have a claim to freon. WPB's policy is to take care of the user who really needs F 12. It considers both the kind of building and the product made. The Houston Chronicle, for instance, is in a hot climate; it is practically without window ventilation. News is considered necessary, so the Chronicle was able to get freon.

The U. S. Capitol will be supplied, too. It will take 14,000 lb. of freon to keep legislators cool. Centrifugal cooling equipment, like that in the White House and the mammoth Pentagon Bldg., uses F 11 which isn't scarce.

WPB estimates that by distributing 75,000 lb. to 100,000 lb. a month it can protect legitimate users. Churches aren't affected; there are less than half a dozen with air-conditioning equipment.

• **Railroad Allocations** — Forty-eight Class I railroads are being notified that WPB has allocated 47,000 lb. of F 12 for use in June in recharging 4,611 sealed and 3,684 nonsealed mechani-

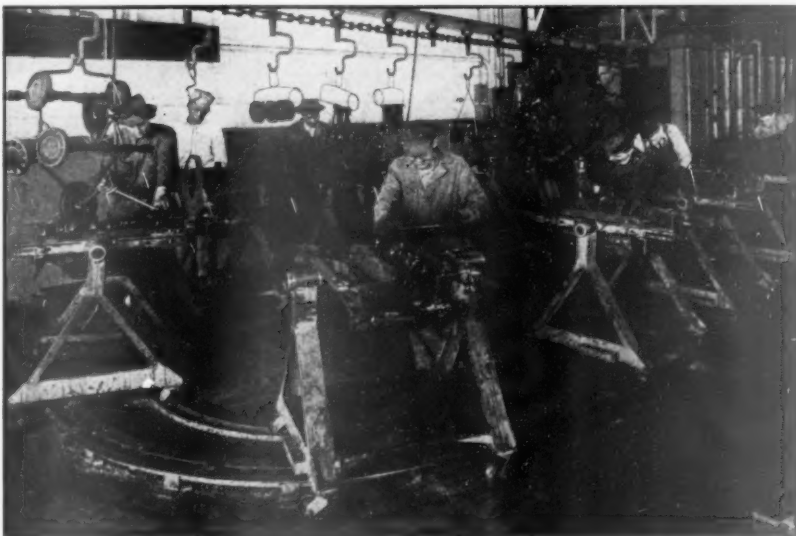
cally equipped passenger cars of all types. July and August allocations have not been made, but the Office of Defense Transportation expects there will be no difficulty. In addition to the 8,295 freon-cooled cars, there are those using ice and the steam-jet systems.

Convention Hall in Chicago, where both the Republican and the Democratic conventions will be held, is not air-conditioned, but the big radio broadcasting companies have secured WPB approval for a freon-cooled box from which they'll report the doings starting June 26 and July 19.

• **New Units**—The new wing of du Pont's Deepwater (N. J.) plant started producing 1,000,000 lb. of gas in March (BW—Mar. 4 '44, p. 78); the East Chicago (Ind.) plant will add 2,000,000 lb. a month beginning Sept. 1. All of this additional output will be needed by the military.

BREAKAGE COMBATED

The pride of the mechanic who makes his own tools is not always an asset. Checkup in Lockheed's Factory B (Vega) at Burbank, Calif., recently disclosed a weekly breakage of more than 2,000 screwdriver bits, cost-

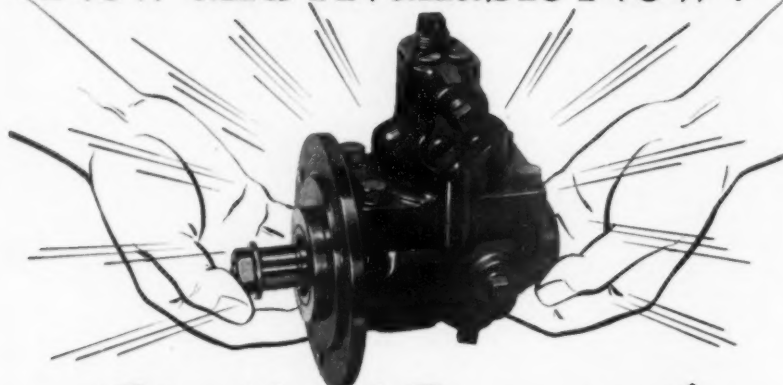


REJUVENATION LINE

Plans to revive the drooping jalopy are abundant (BW—May 6 '44, p. 21), but as yet no official action has been launched. Meanwhile, Detroit's Nutt Motor Rebuilders, Inc., is doing a brisk business, and intends to get more nationally. Employing 400 men, and with facilities to rejuvenate car and truck power plants on a production line basis (above), Nutt can re-

build 200 units daily. Work is held at close tolerances, bearing surfaces being ground to 0.0003 in. and polished to 8 micro-in. Prices are higher than for run-of-the-mill rebuilding—a Ford engine, including clutch repair, costing about \$135—but each unit has a 90-day or 4,000-mi. guarantee. Nutt plans to establish first-rate garages as pick-up depots, to ship worn engines to Detroit, then to reinstall the engines when they are shipped back.

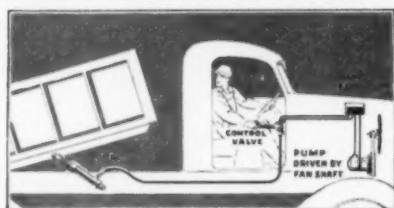
New and Available NOW!



Blackhawk Presents the **P-104 Power-Packer**

- A perfected, inexpensive, power-driven hydraulic pump.
- Operates from fan belt or crankshaft of gasoline or diesel powered vehicles — also from electric motors. Can be driven by gear, silent chain, direct drive or power take-off.
- Replaces hand-operated pumps, mechanical devices and complicated power take-offs. Operator flicks valve to control one or more rams.
- Only 5 H.P. required to develop 4000 lbs. per sq. inch internal hydraulic pressure. Can raise 500 lbs. or 50 tons with equal ease, depending on speed required.

Example of Typical P-104 Application



Today —
Successfully
Operating On
Snow Plows—Presses
Ground Tillers—Bul-
dozers—Scrapers—
Shovels—Road
Finishers—
Trucks

If your product requires the application of controlled force to an operating part — and if you would like to give your equipment added sales appeal and extra speed and ease of operation — then you will want to know about Blackhawk power-driven and hand-operated High-Pressure Hydraulic Controls. Write Blackhawk Mfg. Co., 5300 West Rogers Street, Milwaukee 1, Wisconsin.

BLACKHAWK

High-Pressure Hydraulics

ing 20¢ each, rising \$400. The cause was found to be the use of the bits in poorly made tools. The remedy was the putting on sale to employees, at a nominal price, of properly designed self-aligning screwdrivers and adapters for those bits.

Hidden Enzyme

Lowly milkweed juice found to contain substance useful in chemical tenderizing of meat and casings for frankfurters.

Besides giving its silken floss for the manufacture of life preservers, and its latex-rich juice for experiments in rubber making, the lowly milkweed may make a contribution to the American standard of living by tenderizing tough beef.

• **New Enzyme Source**—Before the war, some tough meat and sausage casings were treated with juice extracted from pineapple and the melon-like fruit of papaya trees. According to Prof. Walter F. Lochwing of the University of Iowa botany department, the milky juice of milkweed stems and leaves also contains an enzyme which might find wider use in the U. S. now that imports of pineapples and papaya have declined because of the war.

Enzyme is any of a class of complex, natural, organic substances of unknown composition that accelerate the specific transfer of material in plants or animals.

• **On Small Scale**—A patent has been issued for the preparation of enzyme from the milkweed juice, but there has been no production on a commercial scale as other preparations for this purpose are said to be more economical.

Swift & Co., meat packers, have used asclepain, the proteolytic (protein cleaving) enzyme found in milkweed juice, in laboratory experiments, although the company explains that none of its meats is tenderized by the use of enzymes. Swift uses enzymes from pineapple juice to improve the eating qualities of animal casings used in frankfurters and pork sausages.

• **Applied by Spray**—Application of the juice is made by spraying it as a fine mist on the links of sausage or by immersing the sausages. The bromelain (protein cleaving enzyme) in the pineapple juice acts upon the natural proteins of the animal casings and breaks down the complex natural proteins into proteins of simple composition which are less resistant to mastication and digestion.

• **Old Native Custom**—First application of enzymes for the tenderizing of meats



Hats off to the men of Steel!

When victory comes, it will be won by fighting men—men superbly trained and armed to the teeth with weapons of the finest steel ever made.

In helping to forge this "ring of steel" around our enemies, the men of this nation's great steel industry have performed a production miracle without parallel in history.

★ They have set an all-time steel-making record . . . nearly 90 million tons a year . . . almost double the yearly average of World War I.

★ They have moved vast mountains of iron ore from the mines of Minnesota to the mills of Pennsylvania.

★ They have created new steels of greater strength and better quality

than were ever dreamed possible a few short years ago.

★ They have developed new products of steel to give our arms the greatest range and striking power on earth.

In this record, round-the-clock service of an industry that knows no rest, thousands of Jenkins Valves have been required to meet tests of

strength and endurance far beyond any ever imposed by peacetime operation. Here, as in equally rigorous service for other vital war industries, their remarkable performance has added new force to the long-established rule that "it pays to standardize on Jenkins"!

Jenkins Bros., 80 White Street, New York 13; Bridgeport; Atlanta; Boston; Philadelphia; Chicago. Jenkins Bros., Ltd., Montreal; London.



JENKINS VALVES

SINCE 1864

For every industrial, engineering, marine, plumbing-heating service . . . in Bronze, Iron, Cast Steel and Corrosion-Resisting Alloys . . . 125 to 600 lbs. pressure.

Does your
Production Manager
Know About
**Wet-Belt
SURFACING?**



THIS FREE
BOOKLET EXPLAINS . . .

PORTER CABLE'S



**MODERN
MACHINING
METHOD**

Learn about it before
you invest in tools, jigs
and fixtures for post-war
products.

★ **WET-BELT SURFACING** is amazingly fast—actually 5 to 25 times faster than previous methods. An entire area, as large as 9 x 17" can be finished with one presentation to the belt. Wet-Belt Surfacing slashes labor costs, **WITH IMPROVED RESULTS.**

★ By keeping both material and abrasive cool, Wet-Belt Surfacing eliminates distortion, flow, discoloring, fracturing, chipping—reducing rejects and conserving material, particularly in finishing plastics and metals of low fusion point.

★ **WET-BELT SURFACING** is a precision method, enabling even inexperienced operators to work within tolerances of .0005" on many jobs. Repeat operations can be handled with production-line speed.

GET A COPY OF THIS BOOK FOR YOURSELF AND YOUR PRODUCTION MEN

Write a letter today—on your company stationery, please—telling us how many copies you want for your key executives.

PORTER-CABLE MACHINE CO.
2030-3 N. Salina St. Syracuse, N. Y.

is credited to the natives of Central and South American tropical regions. There the fruit juice of *Carica papaya*, a tropical plant, has long been used by the natives to improve the tenderness of meats. Slices of meat were rubbed with papaya juice and stored until tendering action took place.

Sheep's Clothing

Wyoming U. experiments with cotton jackets on ewes to protect their fleece until shearing time against dirt and snag.

Clothing sheep in cotton overcoats, as the University of Wyoming College of Agriculture has done experimentally for several years, is not primarily to increase their comfort, but to discover whether it will pay in the form of cleaner and heavier fleece, smaller death loss, and lower feed expense.

• **Price Is Factor**—No decision has been reached, but there are indications of benefit to sheep ranchers if the cost of coats is low enough, and if they are worn only part of the year.

Coats are easily snagged or torn off in brush country, and the lively gamboling of lambs and yearlings is hard on them. Coats cost from 45¢ to 80¢ apiece, and are ordered from several awning and bag houses, according to patterns drawn up at the university.

Tentative conclusion is that a coat must last at least two seasons (worn seven months a season) to make worthwhile savings. Flocks running in Wy-

oming's Red Desert country are wearing coats of several designs. The university is trying to find out which endures best and therefore costs less.

• **Impractical in Summer**—This test also is being used to determine whether fleeces improve cumulatively during four years of wearing coats. Summer wear having been proved impractical, the Wyoming sheep are coated each October and the coats are removed at shearing time.

Previous tests of seven months' wear have produced cleaner, longer wool. The coats improve the appearance and dyeing property of the wool, decrease weathering, shrinkage, dirt, and loss due to snatching brush, and increase length and grease content. In addition, the sheep require less feed, and the mortality rate is lower.

• **13.6% Less Dirt**—In the original experiments, a total of 341 ewes were coated and 343 in the same flock left uncoated. Coats costing \$1 each were worn eleven months, and when the sheep were sheared, the uncleaned uncoated fleeces averaged $\frac{3}{4}$ lb. heavier; but the coated ones averaged $\frac{1}{2}$ lb. heavier after cleaning, the dirt content being 13.6% less. But 45% of coats were lost, running up the cost.

A biological oddity of the test in mixed flocks of coated and uncoated sheep is that—though the lambs of coated ewes were on the whole healthier—fewer of the coated ones dropped lambs, indicating that when the ram had a choice he was suspicious of the coated ewe. When all sheep are coated, the experimenters believe, the ram is less likely to be influenced by his suspicions.



Sheep in cotton clothing may yield finer wool. But a biological disadvantage indicated in experiments thus far is the ram's suspicion of the coated ewe.

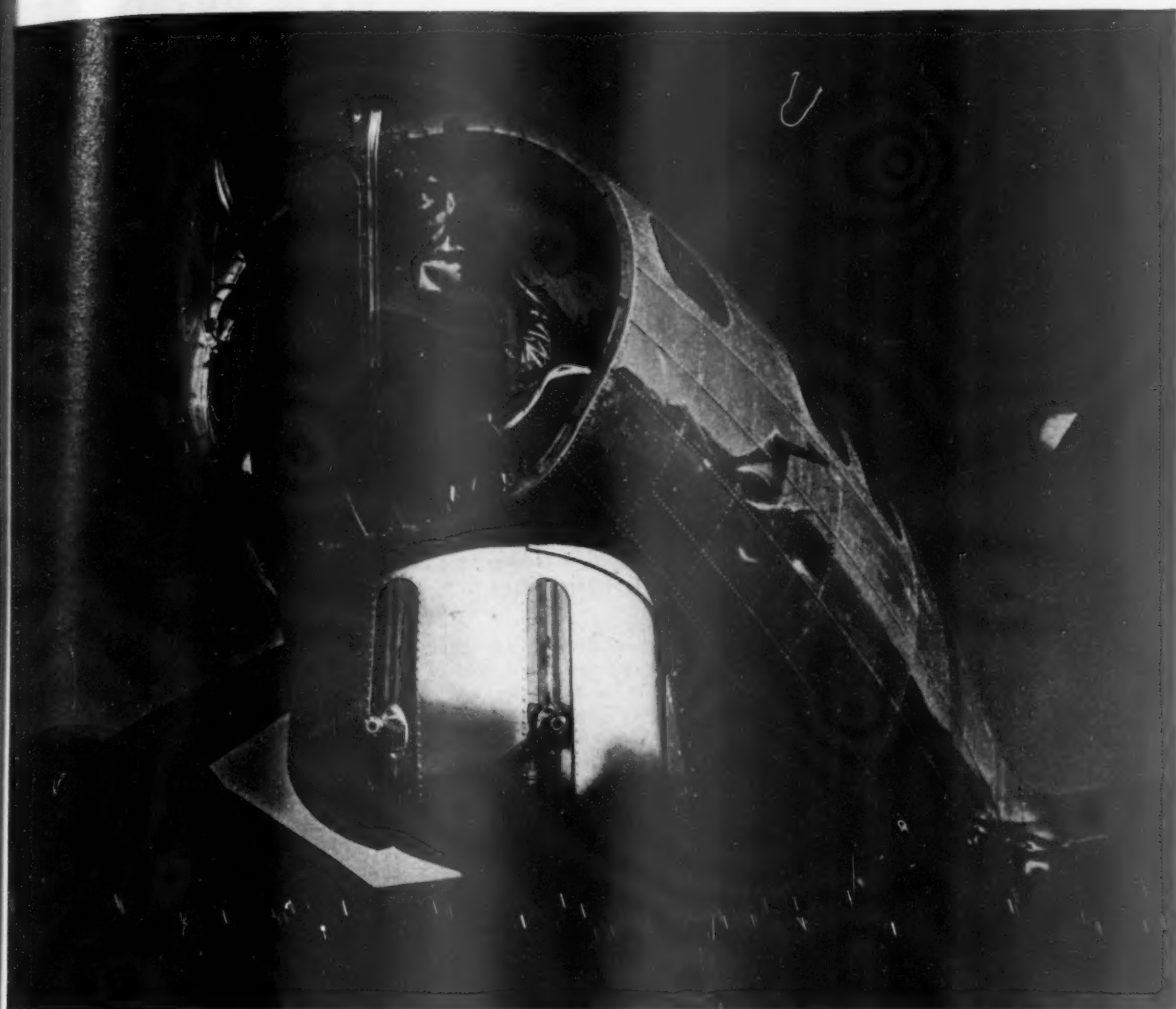
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Finish the Fight with War Bonds

... a jump ahead

In the swift pace of modern warfare, flexibility of design and production is vital in keeping the Fortresses ahead of enemy innovations. In the words of a top-ranking general, "German scientists are working day and night. We must beat them to the punch. So far, we have been able to stay one jump ahead."

To the casual observer, the Boeing Flying Fortress that comes off the line today looks exactly like those turned out a month ago. Actually, it's different. It has been improved to meet constantly changing combat needs. Most of these revisions are not as apparent as the recently added chin turret shown above.

While the basic design of the Fortress has remained practically constant since its inception, more than 800 detail changes, dictated by battle experience, were made by Boeing engineers on the B-17F series alone . . . and each of these changes was incorporated into the Boeing Fortresses also being built by Douglas and Lockheed.

On every battlefield, Boeing maintains experienced engineers. They provide the home plant with constant "blow-by-blow" information on combat performance, pointing up needs for any technical changes. They furnish engineering data to Army ground crews. And

to meet new enemy tactics they have even made design changes at the front.

These Boeing Field Service engineers are replaced every nine months by men from headquarters. The exchange of engineering experts helps to keep the Flying Fortress always a vital "jump ahead". . . one of Boeing's most important contributions to an earlier peace.

Integrity in research, design, engineering and manufacture . . . these are Boeing hallmarks. True of the Fortress today, it will be equally true of peacetime products . . . if it's "Built by Boeing," it's bound to be good.

DESIGNERS OF THE FLYING FORTRESS • THE NEW B-29 SUPERFORTRESS • THE STRATOLINER • TRANSOCEAN CLIPPERS

BOEING

- 1
Slippery—a Good Lubricant.
Softer than talc
- 2
Conducts Electricity
- 3
Withstands Temperature Extremes
- 4
Absorbs, Radiates and Conducts Heat
- 5
Maximum Purity
- 6
Low Coefficient of Expansion
- 7
Particles Bear Like Electric Charges
- 8
Insoluble in Acids and Alkalies
- 9
Black and Opaque
- 10
Gas Adsorbent
- 11
Little Photoelectric Effect
- 12
Miscible with Most Fluids
- 13
Films Adhere Tenaciously and Dry with Sharp Edges
- 14
Microscopically Fine Particles.
Penetrates Fine Pores
- 15
An Excellent Suspension

COLLOIDAL GRAPHITE

only

Provides All These
**PHYSICAL and
CHEMICAL
PROPERTIES**



Listed here are fifteen of the more important physical and chemical properties of "dag" colloidal graphite which is a smooth black liquid concentrate. It is used to obtain dry and fluid films, surface coatings and as an impregnating medium.

Specific applications are as follows: Dry films formed from "dag" colloidal graphite supply durable lubrication on parts which could not be effectively lubricated otherwise. Such films are functioning at temperatures from $(-60^{\circ}\text{F. to } +1200^{\circ}\text{F.})$ and higher. Here properties 1, 3, 13, and 14 are utilized.



GEAR TRAIN

Graphite films when applied to the grids (and frequently the plates) of radio tubes for receiving and transmitting, are useful for minimizing secondary emission, "back" emission and photoelectric effects. Here properties 2, 3, 4, 10, 11, and 13 are utilized.



ELECTRONIC TUBES

Check this list of properties carefully in connection with the operations in your own plant. If any of the properties of "dag" colloidal graphite can make your job easier to handle, write Acheson Engineers. Let them suggest how best to apply colloidal graphite. Their experience probably includes similar applications.

Dag, Oildag, Aquadag, Castordag, Glydag and Prodag are registered trade marks of Acheson Colloids Corporation. Copr. 1944 by Acheson Colloids Corp.

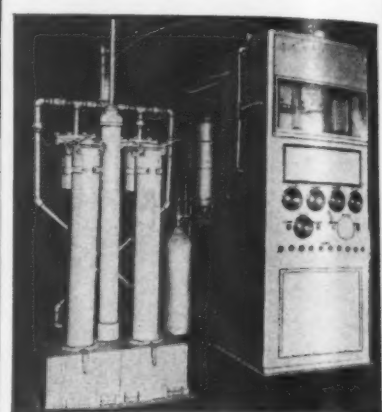


ACHESON COLLOIDS CORPORATION
PORT HURON, MICHIGAN

NEW PRODUCTS

Bleach Generator

The new Chlorine Dioxide Generator developed by the Matheson Alkali Works, 60 E. 42nd St., New York 17, makes conveniently available a bleaching agent for flour, starch, paper, textiles, and other materials that is more than twice as powerful as chlorine. The fact that the heavy gaseous compound is so unstable that shipment is difficult has restricted previous applications.



Business parts of the generator are two ceramically lined steel towers (left), 4 in. in diameter and $3\frac{1}{2}$ ft. tall, containing flaked sodium chlorite. Chlorine and air are fed into the bottom of the first tower which react with the chlorite to make chlorine dioxide. The bleach is collected in the control cabinet (right) for piping to any point in a plant. When the chlorite in the first tower is exhausted, the flow of chlorine and air is diverted through the second while the first is being recharged.

Further uses for ClO_2 are indicated in improving the taste of public water supplies, checking blue mold in citrus fruits, and reducing spoilage in packaged foods. Successful experiments are reported on increasing the yield of penicillin by sterilizing the atmosphere surrounding its native mold cultures with the gas.

Insecticide-Fungicide

Volume production of Dithane, the newest insecticide-fungicide discovered and formulated by the Rohm & Haas Co., Washington Sq., Philadelphia 5, is scheduled for September. Recently completed field tests indicate that it "can be sprayed on the ground and absorbed by food-producing plants to render them immune to insect and fungi destruction" and that it is "fatal

to both chewing and sucking insects but harmless to plants and nontoxic to man."

Plots sprayed with the "answer to the gardener's prayer" have already made possible "potato yields running from 25 to 100 bu. more per acre than plots sprayed with conventional fungicides." The organic chemical, which goes by the professional name of diethylene - sodium - misdithiocarba-

THINGS TO COME

Much as spokesmen for the automotive industry insist that the first postwar cars will be fundamentally unchanged replicas of 1942 models, "jet cooling" of pistons is one important recent development that may be incorporated with practically no retooling. What it calls for is a simple pipe under each piston for cooling it with a jet of the engine's regular, recirculating lubricating oil. What it will accomplish is the virtual elimination of sticking piston rings, blow-by, excessive wear, and abnormal oil consumption.

Electronic sorting machines for quickly routing the interplant and intraoffice mail of large business organizations are technically possible futurities. Photoelectric eyes would scan checkerboard designs along the bottom edges of envelopes that would be filled in various prearranged patterns by senders to provide code symbols for particular destinations. Electronic sorting machines are likewise technically possible for government post offices, but practically improbable.

Scratchless watch crystals made of hard, clear, white sapphire are scheduled to protect the faces and hands of high-grade timepieces as soon as sufficient quantities of the material can be spared from many wartime applications. Though the sapphire is fused by man out of aluminum oxide, it is identical in composition and structure with the natural jewel. Because the substance is next only to the diamond in hardness and can be built up to larger sizes than the natural crystals of either stone, it is now doing critical jobs in aircraft instrument bearings, wire-drawing dies, small plug gages, diesel injector nozzles, windows for pressure vessels, thread guides, cutting tools, and so on.

BYRON WESTON CO. LINEN RECORD, EXTRA NO. 1 100% DEFANCE LEDGER 100% WAVERLY LEDGER 75% CENTENNIAL LEDGER 75% WINCHESTER LEDGER 50% BLACKSTONE BOND 25% WINCHESTER BOND 50% BLACKSTONE BOND 25%



If YOU BELIEVE IN *Keeping* RECORDS
KEEP THEM ON

WESTON PAPERS

The records, documents, contracts, letters and papers you'd find it awkward or expensive to replace are the ones that ought to be placed on WESTON Cotton Fibre Content Paper.

Weston Papers are specifically made to withstand the ravages of time and of careless or hurrying hands. For proof, look at the Weston watermark in the pages of your community's permanent records of real estate and personal property.

An excellent rule of paper procurement—*as your supplier will readily agree*—is this:

WESTON PAPERS IN THE WAR

The Weston mills and laboratory are exceedingly active in the development and production of papers to fill urgent needs of the U. S. Army, Navy, Government and war industry.

Techniques acquired in the manufacture of these papers will be utilized to produce finer-than-ever Weston papers for a broad range of postwar purposes.

if it's worth keeping, keep it on a WESTON paper

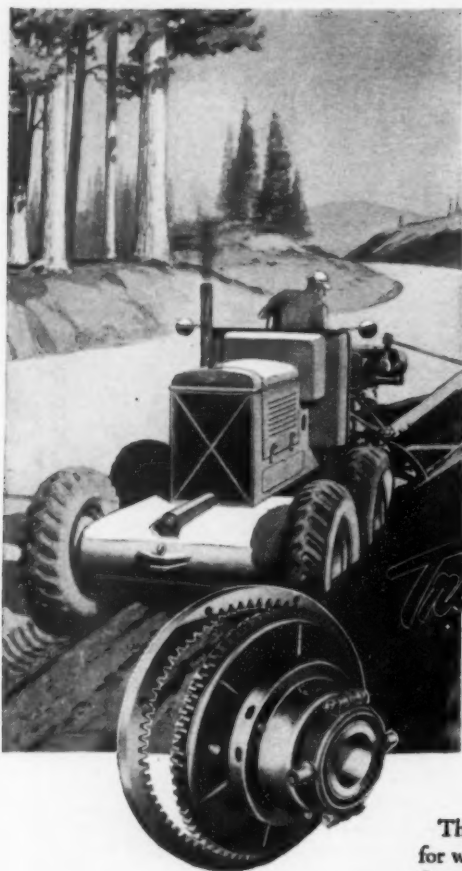
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DALTON, MASSACHUSETTS

MAKERS OF HIGH GRADE PAPERS

EVERY WESTON PAPER IS A COTTON FIBRE CONTENT PAPER



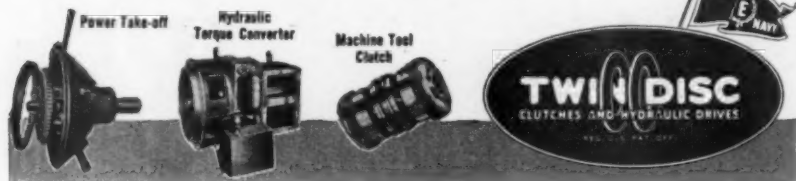


FOR MODERN PIONEERS

Straighter, shorter roads are things most of us take for granted. Yet, highways to facilitate transportation of people and goods—roads over which to haul raw materials from new sources—are vital factors in any formula for human progress.

Nowadays we get fast action on the new-road building, which means better living, with mechanical power applied through clutches. Pushing aside and leveling the earth, brute machines accomplish in days what it took early pioneers months to finish. In its more than 26 years of specialization in the design and manufacture of industrial clutches, Twin Disc Clutch Company has provided many rugged, dependable power links for such machines.

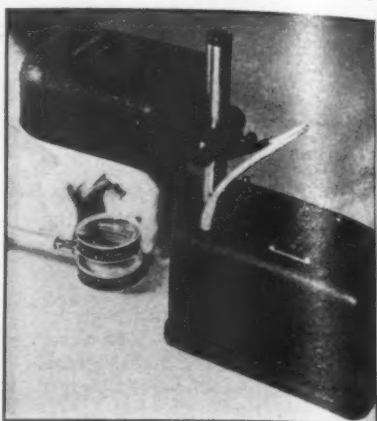
The Twin Disc Model CL heavy-duty friction clutch is built to withstand severe shock loads in the most exacting service under difficult conditions of operation



mate, is even said to act as a repellent to certain insects, such as aphids.

Quartz Optical Flats

Six sizes of DoAll Optical Flats, ranging from 2 in. in diameter to 10 in.,



are being manufactured by Continental Machines, Inc., 1301 Washington Ave. S., Minneapolis 4, for the accurate inspection of master flats, micrometer anvils, flat surfaces of gages, machine parts, and so on. What distinguishes the new products from the general run of optical flats is that they are ground and polished from fused Brazilian quartz, a material that is harder and has a lower expansion coefficient than optical grade glass.

Shown with a couple of the quartz flats is the recently developed DoAll Monolight which provides the yellow, monochromatic light of pure helium in a single wavelength. Since the light is high in intensity and easily concentrated on a flat, the distinguishing of "fringes," or interference bands, set up by the flat and any surface being measured for flatness, is facilitated.

Hand-Held Heater

Newest hand tool is the Model LRJ-3 Near Infrared Unit manufactured by the Fostoria Pressed Steel Corp., Fostoria, Ohio. It consists of a 375-watt carbonfilament lamp, a gold-plated, concentrating steel reflector, an insulated handle, and a connecting cord with inbuilt switch.

Since the lamp will develop temperatures up to 1,000F in almost any kind of material in less time than it takes to describe the operation, it lends itself to a wide variety of industrial and domestic uses. Applications range from heating soldering lugs for electrical connections and drying touch-up lacquer jobs to thawing frozen pipes and reflowing carbon on carbon paper to give it a new lease on life.

When **TIME**

is important...



Starting with a few Underwood Sundstrands, one large grocery chain now uses 4,800!



For its batch sheet and transit letter listings, a New York bank has purchased 150 Underwood Sundstrands.



Expense distribution is just one of the many uses a large electrical manufacturing company finds for its 450 Underwood Sundstrands.



One of the world's largest motor car manufacturers uses 550 Underwood Sundstrands in its accounting department and in its general offices.



Preparation of statements and general office work are handled by a meat packer with a battery of 400 Underwood Sundstrands.



Figure on an Underwood Sundstrand!

Faster, easier figuring saves precious minutes every hour.

When you figure on an Underwood Sundstrand you're figuring on a machine that pays for itself as you figure.

Basic principle of the Underwood Sundstrand is its simple method of 10-key "touch operation." With all figure keys under the fingertips of one hand, operators can quickly attain speeds they never thought possible.

And because their eyes are kept on

the work sheets and don't have to help the fingers "pick and choose" from a multiplicity of keys, there is no back-and-forth headswing to cause fatigue.

A call to your Underwood Sundstrand representative will bring you, without obligation, interesting information on this time-saving adding-figuring machine.

Underwood Sundstrand Adding-Figuring Machines are available subject to War Production Board authorization.



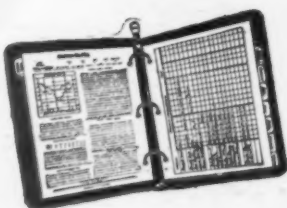
Our factory at Bridgeport, Connecticut, proudly flies the Army-Navy "E," awarded for the production of precision instruments calling for skill and craftsmanship of the highest order...

Save the Seconds and You Save the Day—

Underwood Elliott Fisher Company

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Makers of Underwood Typewriters, Accounting Machines, Adding-Figuring Machines and Supplies.



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FINANCE (THE MARKETS—PAGE 118)

Atlas to Unload

Odium firm's statement to SEC confirms reported plan to offer the bulk of its R-K-O 6% preferred holdings for sale.

The filing of a Securities & Exchange Commission registration statement last week finally confirmed recent reports that the Atlas Corp., the big investment company headed by Floyd B. Odium who is also R-K-O's chairman, had arranged to sell part of its controlling stock interest in Radio-Keith-Orpheum Corp., one of moviedom's largest producers, distributors, and exhibitors.

• **A 50% Interest**—It isn't a small block of shares, either. For a syndicate headed by Lehman Brothers and Goldman, Sachs & Co., two large Wall Street investment houses often identified with past movie financing, soon will offer publicly some 57,000 of the 65,000-odd shares of R-K-O 6% preferred which Atlas is now reported to hold. This would be a 50.7% slice of that issue.

The transaction will involve a substantial sum since the shares, on which \$15.50 of back dividends were paid this year, have enjoyed a \$108-\$85 price range on the New York Stock Exchange thus far in 1944 and are now selling at around \$92.

• **A Speculative Buy**—The present interest held by the Atlas Corp. in R-K-O, which is primarily a holding company, was purchased as a speculation some years ago when the picture company was awaiting reorganization under Section 77B of the bankruptcy laws.

Odium and his company became active in the bankruptcy hearings which followed and they played an important part in helping to consummate the readjustment of finances effected in January, 1940, that finally resulted in R-K-O's formal discharge from the bankruptcy courts two years later.

So prominent did they become in the company's affairs in the interim that Atlas finally underwrote at \$3 a share an offering of 500,000 shares of new common stock to raise the cash needed to consummate its reorganization plan, and Odium wound up as chairman of the new organization's board of directors.

• **RCA and Rockefeller**—Active in the reorganization also were Radio Corp. of America, due to its large investment in the old company, and Rockefeller Cen-

ter, Inc., a Rockefeller interest which came into the picture because of R-K-O leases of the important Music Hall and Center theaters, the two playhouses located at Radio City.

As a result, at the close of 1942 Atlas and the two other companies held about 77% of R-K-O's outstanding common stock and RCA and Atlas about 80% of the company's 6% preferred which currently shares equal voting rights with the common.

Since then, however, RCA has disposed of all its R-K-O holdings to a Wall Street distributing group for some \$6,500,000 in cash, and in the same deal the Rockefeller Foundation seized the opportunity to sell 96,000 common shares it had previously acquired.

• **Voting Control**—The present sale of so much of its preferred will lessen Atlas' control of R-K-O. However, Atlas is reported still holding a bit over 50% of the common stock, and the stock is now more widely distributed than ever before.

Many believe, therefore, that effective voting control of the R-K-O property could easily be maintained with even fewer shares than those now held by Atlas.

How much cash Atlas has put into its R-K-O investment has never been



As president of Atlas Corp., and chairman of R-K-O, Floyd B. Odium looks back on the rapid growth of the investment house and a financial rescue of the movie firm that paid off.

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LET'S ALL KEEP BACKING THE ATTACK... BUY MORE WAR BONDS!



SEE-ABILITY TOMORROW

Soft, eye-comfortable fluorescent light for offices and higher levels of light for streets and highways are just two examples of See-ability benefits tomorrow. In your post-war planning, remember the importance of good lighting. Get helpful advice and information now about new lighting developments from your local power company or Westinghouse distributor. *And for leadership in lighting—watch Westinghouse!*



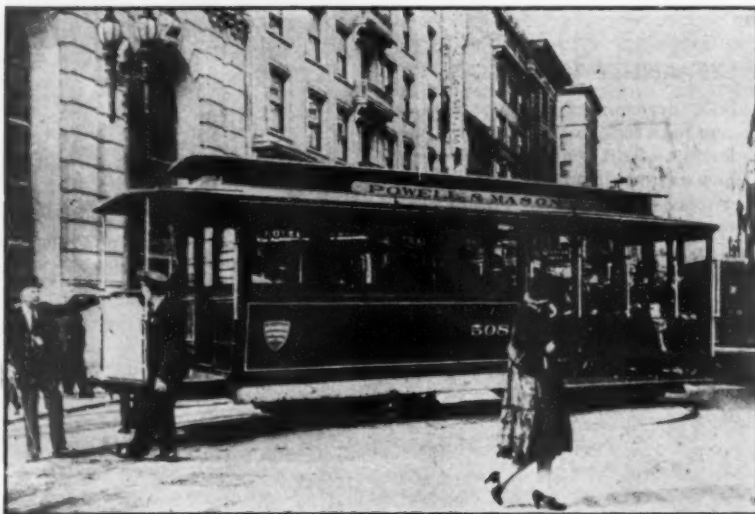
WESTINGHOUSE PRESENTS

JOHN CHARLES THOMAS • SUNDAY 2:30 EWT., N.B.C. •
"TOP OF THE EVENING" • MON.-WED. FRI.-10:15 EWT., BLUE NET.

Pride in Cable Cars Worth \$7,500,000

The Bostonian's regard for his beans and the Chicagoan's pride in the lake breezes are intangibles, but San Franciscans have a \$7,500,000 tag on their love for the tiny cable cars that clank and rumble over their precipitous streets.

A demonstration of their sentiment for the aged hill creepers is the result of a May 16 election in which the citizenry voted its millions for municipal purchase of the Market St. Ry., and its 38 cars. Also involved in the deal is a variety of mod-



ern equipment and real estate, but almost everyone agrees that the measure wouldn't have passed without Mayor Roger D. Lapham's promise not to scrap the cable system.

In taking over the railway, San Francisco gets the Jackson St. route and the Powell St. line (left) which since the early 80's has been a top-notch point of interest for tourists.

To visitors and residents alike, a Powell St. ride is an exciting experience. They gladly pay the 7¢ fare for the slow but thrilling trip past the swanky Mark Hopkins and Fairmont hotels, over the crest and down the breath-taking drop through Chinatown to Fisherman's Wharf. An added tourist attraction is the privilege of helping to push the car around on its turntable (below) at the journey's end.

Now the proud owners of two cable lines, San Franciscans are becoming interested in the other two which the California St. Cable R.R. Co. is offering for \$450,000, complete with 47 cars. These are the Jones-O'Farrell-Hyde road and the old California St. line which is the "snootiest" cable run in the city.

Besides traversing one of the country's longest and steepest hills, it serves both Chinatown and the financial district. High also among its features is the traditional courtesy of the conductors and gripmen. (They are what motormen are to street cars.)

Seldom are they in such a hurry that they'll refuse to stop in mid-block while a passenger chases his hat or retrieves some other belonging dropped through the car's open sides.

officially announced. Estimates by outsiders run from \$6,000,000 to \$8,000,000.

• **Profitable Investment**—Hollywood and Wall Street agree that Atlas has profited handsomely from its interest in the company since (1) all dividends have been paid up to date on its preferred (2) about \$5,000,000 should be realized from the sale now arranged, and (3) Atlas will be left with an interest of more than 50% in R-K-O common worth at least \$13,000,000 as the stock is now selling for above \$9 on the Big Board.

Also, R-K-O soon may be able to pay an initial dividend on its common as it has just reported 1943 earnings of close to \$7,000,000, or above \$2 on such shares, compared with \$736,000 and \$539,000 of profits in 1942 and 1941.

• **How It Flourished**—The Atlas Corp. organized in 1923 by Odium as a private enterprise with a capital of \$40,000, enjoyed phenomenal growth in the early 1930's due to an aggressive expansion program that resulted in the acquisition at depression-deflated prices, of many investment trusts.

In the same period, large cash resources maintained by Atlas since 1923 were used to buy industrial common stocks at their then depression prices. As a result, by the close of 1936 net asset value of the company's common stock, based on market value of its holdings, had increased from around \$7 in 1932 to \$18.77 a share.

• **Special Situations**—Since then, Atlas has become more interested in special situations than stocks in general. Consequently, its mode of operation has become different from those of most in its field.

At the 1943 year-end, for example, 12% of its investments, cash, etc., comprised a 76% interest in the Ogden Corp. (successor to Utilities Power & Light) and 28% was its R-K-O holdings.

About 12% represented its controlling interests in such varied situations as Bonwit Teller, Inc., one of New York's prominent women's specialty shops; the Rotary Electric Steel Co., a producer of electric furnace alloy steel; and Franklin Simon & Co., a New York department store.

Controlled, too, was a San Francisco office building. Substantial interests were held in New York's prominent Sherry-Netherlands and Plaza hotels.

• **Power and Fruit**—In the interim, Atlas hasn't neglected holding large blocks of securities of the nature traded in by other investment trusts. Looming large in this connection are \$5,000,000 of stocks and bonds of American & Foreign Power, of which Odium is a director, and 15,000 shares of United Fruit, whose head, Samuel Zemurray, is one of

MEMO NO. 2 FROM POMONA PUMP'S DATABASE

Check the advantages of Pomona Pumps' VERTICAL design!

Pomona Pumps offer many vital advantages over conventional types—vital no matter what your pumping application—agricultural, industrial, mining, municipal, marine, or any other. For example, their modern vertical design makes possible much greater convenience, safety, and efficiency on all types of pumping jobs...

NO PRIMING—NO "DRY PITTS". The ideal way to eliminate priming in any pump is to have the pump below the fluid level. Fluid then flows by gravity into the pump chamber, assuring positive feed at all times.

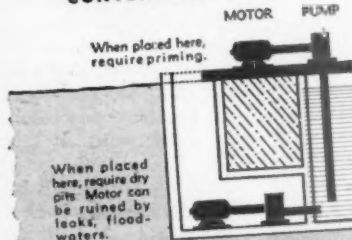
In horizontal pumps the motor is *alongside* the pump (see below). Therefore, placing the pump below fluid level means placing the *motor* below fluid level. Then, to keep the motor dry, a costly "dry pit" is constructed for the unit. Even then, flood waters can fill the pit, ruin the motor

lead to increased pump investment, high maintenance, restricted service. In Pomona's the motor is *above*—not alongside—the pump. This means the pump can be *completely submerged* in the fluid where it is always primed... yet the motor is above fluid level, always dry, always convenient and no costly "dry pits" are needed. Thus, the Pomona vertical design combines the no-priming advantages of sub-surface pump position with the convenience and safety of above-surface motor location!

...and servicing is both complicated and inconvenient.

Or—to eliminate "dry pits"—horizontal pumps can be placed *above* fluid level. But then water no longer flows freely into the pump, so it must be primed whenever started, resulting in complications that

CONVENTIONAL PUMPS



POMONA PUMP



Pomona Pumps are one of the many types of mechanical, hydraulic and electrical power equipment produced by Hendy Divisions. Other products include Hendy steam turbines and Diesel engines, Westco pumps, and Crocker-Wheeler electric motors and generators.

POMONA PUMP DIVISION

JOSHUA HENDY IRON WORKS

ESTABLISHED 1856

POMONA, CALIFORNIA

Branch Offices: BOSTON · BUFFALO · CHICAGO · CINCINNATI · CLEVELAND · DETROIT · NEW YORK · PHILADELPHIA · PITTSBURGH · SAN FRANCISCO · ST. LOUIS · WASHINGTON · LOS ANGELES



Hendy Products



MOTORS & GENERATORS
CROCKER-WHEELER
DIVISION



VERTICAL TURBINE PUMPS
POMONA PUMP
DIVISION



HORIZONTAL TURBINE PUMPS
WESTCO PUMP
DIVISION

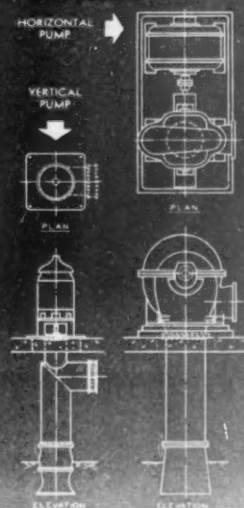


STEAM TURBINES, DIESELS
JOSHUA HENDY
DIVISION



80% SAVING IN SPACE

The drawings above show how a Pomona Vertical compares in space requirements with a horizontal centrifugal pump handling identically the same capacity and head. The Pomona requires 16 sq. ft. of floor space—the horizontal, 80 sq. ft. ... a direct saving of 80%!



The drawings above show how a Pomona Vertical compares in space requirements with a horizontal centrifugal pump handling identically the same capacity and head. The Pomona requires 16 sq. ft. of floor space—the horizontal, 80 sq. ft. ... a direct saving of 80%!

Note the simple compact lines of the Pomona compared with the other pump. And also note this... the Pomona has fewer parts to service, and weighs only half as much. That means extra savings in foundation costs to add to the savings in installation, maintenance and operation.

No matter what your water-moving application, get the full story on Pomona Pump advantages before you invest in any pumping equipment. Send for booklet containing much helpful information!

This announcement is neither an offer for sale nor a solicitation of any offer to buy securities. The offering is made only by the Prospectus.

The Hecht Company

191,515 Shares Common Stock

(Par Value \$15 Per Share)

Price \$21.75 Per Share

A copy of the Prospectus may be obtained within any State from such of the Underwriters named below and from such of the other Underwriters as may lawfully distribute the Prospectus within such State.

Goldman, Sachs & Co.

Blyth & Co., Inc.

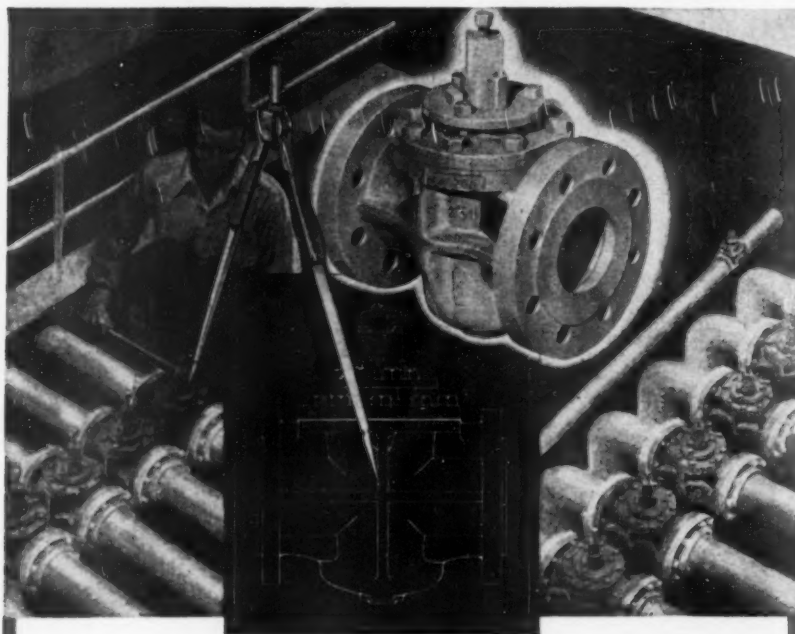
Lehman Brothers

The First Boston Corporation

Kidder, Peabody & Co.

Merrill Lynch, Pierce, Fenner & Beane

May 16, 1944.



For flowline safety, sound engineering points to
NORDSTROM VALVES

Protected by "Sealdport" lubrication. Keep upkeep down.

MERCO NORDSTROM VALVE CO.
Subsidiary of Pittsburgh Equitable Meter Co.

MAIN OFFICES: PITTSBURGH 8, PA.
BRANCHES IN PRINCIPAL CITIES.

the only two Atlas directors not officers of the company.

Net asset value of Atlas' common stock last year rose 57% to more than \$19 a share, the highest ever reported.

Odum recently told his stockholders that Atlas, which at the 1943 year-end had cash and governments totaling \$750,000, hoped to participate actively in "reconstruction, reconversion and development both at home and abroad in the postwar period—if present "restrictive" tax laws were changed sufficiently to warrant the use of "risk venture" capital.

Curbs Sustained

New York law controlling stockholder suits is upheld in Corn Products case. Plaintiffs ordered to post bond—or else.

Various sections of the recently enacted amendments to New York state's General Corporation Law which limit the scope of minority stockholder suits (BW—Mar. 18 '44, p. 66) were declared constitutional last week by Justice William T. Collins of the State Supreme Court.

Also, Justice Collins ruled them retroactive and applicable to any such actions now pending before the courts.

• **Limitations on Plaintiff**—Declared valid was that section of the law which provides that no stockholder suit may be brought against a corporation unless the suing stockholders own at least 5% of the company's outstanding shares or stock with a value in excess of \$50,000, without posting a bond covering all attorney fees and expenses of the defendants.

Upheld, as well, was the provision which now requires a corporation to pay the expenses of directors who are successful in defending themselves against stockholder charges.

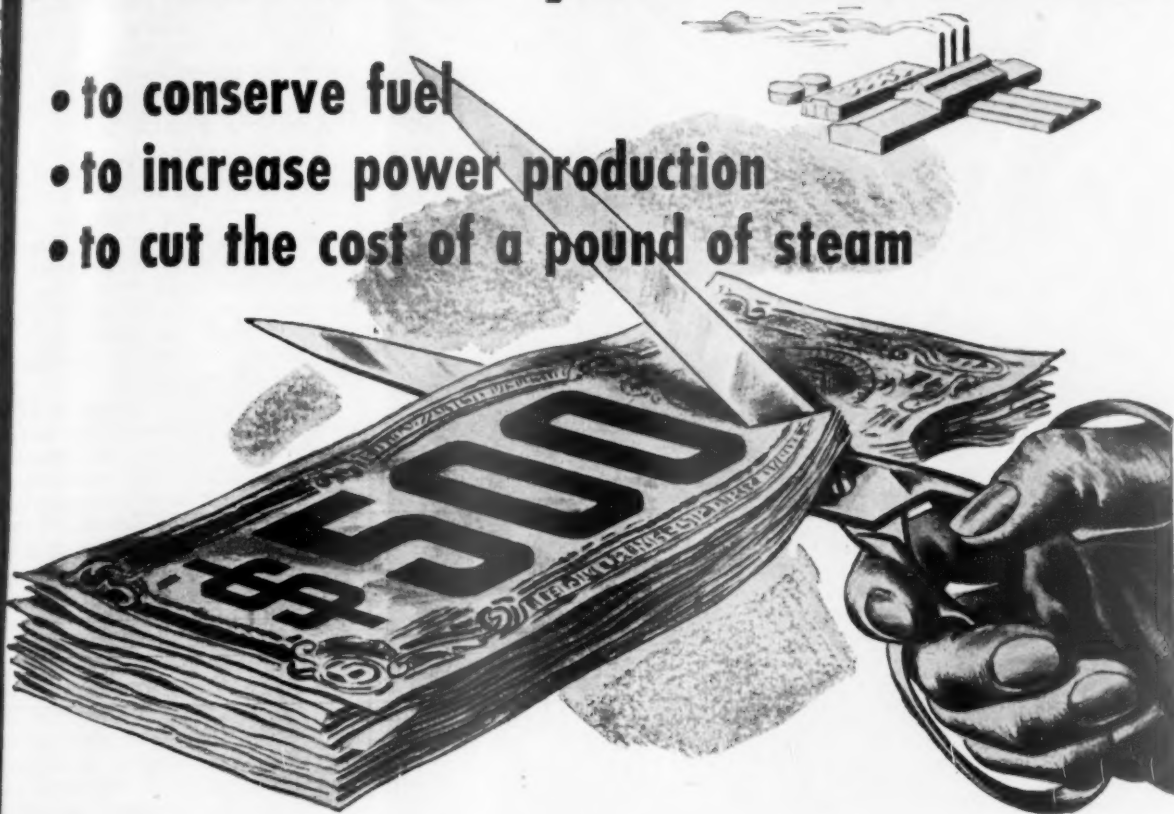
• **Employee Bonus**—These rulings were handed down in an action brought in 1940 by two minority stockholders against Corn Products Refining Co. The suit demanded an accounting of net profits from 1934 to 1939 and reimbursement of the corporation for sums allegedly wrongfully computed and paid out under a profit-sharing plan.

According to Corn Products officials, the employees' profit-sharing plan has been in operation since 1917 and was approved by stockholders in 1921. Also, they report that the suit represented the first attack ever made on the method of computation.

• **Bond Demanded**—The corporation claims that the plaintiffs hold less than

MODERNIZE your Boiler Plant

- to conserve fuel
- to increase power production
- to cut the cost of a pound of steam



GREAT strides have been made in the efficiency of combustion equipment in the last decade, and TODD research engineers have led the field.

Fuel savings as high as 10%—plus even larger increases in heat and power production—are not unusual when modern TODD burners replace less efficient types! And this means, of course, a substantial reduction in the *cost* of producing steam.

Right now, when fuel waste is a national problem and power production is at a premium, it is doubly important that you get a survey of your boiler plant, and install

modern equipment at the first opportunity. TODD engineers will be glad to make an impartial study of your entire heat and power set-up, without obligation.

And remember, the manufacturer, whose steam costs are reduced to a minimum *now*, will be in a better economic position when normal competition returns. For steam is a "raw material" in the production of practically every product.

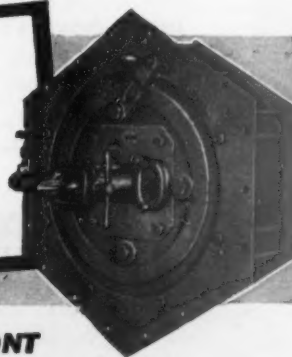
From every point of view, conditions now are favorable for boiler plant modernization. Get detailed specifications of needed improvements immediately.



TODD SHIPYARDS CORPORATION

(COMBUSTION EQUIPMENT DIVISION)
601 West 26th Street, New York 1, N. Y.

NEW YORK * BROOKLYN * HOBOKEN * BARBER, N. J. * SO. PORTLAND, ME.
GALVESTON * HOUSTON * MOBILE * NEW ORLEANS * LOS ANGELES
SAN FRANCISCO * SEATTLE * TACOMA * BUENOS AIRES * LONDON



ON THE FIRING LINE OF AMERICA'S WAR PRODUCTION FRONT



ON THE JOB FOR UNCLE SAM

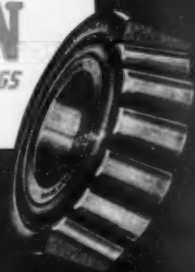
The spectacular production job America is doing is one of the miracles of all time. Timken Bearing equipped machinery of every type and description is producing much more—much faster—much better and at less cost. Every month millions of Timken Bearings go into service for Uncle Sam and you. Timken Bearings keep a big part of America's plant facilities as well as our guns, tanks, ships and planes in tip top operating efficiency.

TIMKEN
TAPERED ROLLER BEARINGS

Copyright 1941 by The Timken Roller Bearing Co.

THE TIMKEN ROLLER BEARING CO.
CANTON, OHIO

*Timken Bearings, Timken Alloy Steels,
and Tubing and Detachable Rock Bits*



0.0013% of its outstanding stock and shares worth less than \$2,000. Proceeding under the new statutes, it recently asked the court for an order requiring the plaintiffs to post \$113,100 to guarantee expenses and attorney fees.

This application has been granted and the court has ordered the plaintiffs to post the necessary security.

DELISTING RULES SET

The Securities & Exchange Commission finally has indicated a willingness to grant the application made some months ago by the Shawmut Assn. of Boston, for permission to withdraw its shares from listing and registration on the Boston Stock Exchange, despite the earlier efforts of the exchange to prevent the delisting (BW—Jan. 29 '44, p. 82).

In an important change of policy on delistings, however (it was the first time SEC has imposed such restrictions in such an action), the commission required the trust to obtain assents from (1) the majority of individual holders of its shares, and (2) a majority of the outstanding stock, before the delisting.

SEC also directed that in its solicitation of assents the trust must submit full information for the guidance of stockholders. The commission required that the stockholders be asked to consider whether they are likely to find better prices for their shares in the over-the-counter market "as suggested by the trustees or the contrary as suggested by the evidence" adduced at previous SEC hearings on the subject.

TELL WHY THEY SAVE

Almost 43% of the savings bank depositors questioned in a survey just completed by the National Assn. of Mutual Savings Banks reported that they have been accumulating savings to take care of their "future needs and opportunities."

The survey, which was participated in by member banks with 3,600,000 depositors who had \$3,500,000,000 in deposits, revealed that the desire to own a home was the chief motive behind the savings of 13% of those surveyed. About 8% were saving to refit present homes with new fixtures and furniture. Another 6% were planning to marry, and were stowing away cash to start housekeeping.

Provision for higher education for their children caused 11% of the depositors to open savings accounts; more than 41% were putting aside cash to increase life insurance or annuities; 4% were aiming to establish new businesses and some 21% were saving to buy new farms.



Thank You, Kachina-

YOU HELPED US DESIGN AN OBSERVATION CAR

Designing car interiors that are in harmony with the landscape calls for painstaking research.

Seeking inspiration in the great Southwest, our designers met Kachina. Kachina is an Indian figure and this picture is from one of dozens of color photographs taken of Indians, their pueblos, arts and crafts, symbols of their tribal rites, and their environment.

By studying, combining this folk lore, our designers evolved decorative schemes as restful to the eye as the appointments are comfortable to the body—produced an observation car luxurious and colorful, a pleasant place for relaxation and social contacts where time passes quickly. This is but one example of Pullman-Standard's efforts to give the traveling public greater comfort, greater pleasure . . . more for its money.

In engineering, too, the same thorough search goes on today to find better and faster ways of producing armament to speed more quickly the day of peace. With no relaxation of that effort Pullman-Standard's eye is to the future. A future of continuing developments that will give you better lightweight, streamlined transportation transcending for comfort and convenience anything you have ever experienced.

Buying War Bonds—and keeping them—helps prevent inflation!

In addition to railroad passenger cars, Pullman-Standard designs and manufactures freight, subway, elevated and street cars, trackless trolleys, chilled tread car wheels and other railroad equipment.

PULLMAN-STANDARD
CAR MANUFACTURING COMPANY
CHICAGO, ILLINOIS

Builders of America's First Modern Streamlined Train

Offices in seven cities . . . Manufacturing plants in six cities

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Portland, Oregon's Favorite PIN-UP

A new type
of news-gathering
makes the
Oregon Journal's
Wartime Living
Page unique!

● THE WAR brought to Portland more than just new industries, new people and increased payrolls; it brought more than the normal problems of rationing and curtailments, of freezes and salvage drives. War-swollen Portland was definitely a "problem area."

Existing government agencies were expanding; new government agencies popping up and mushrooming from office building to office building.

Even astute businessmen were confused about what they could or could not do; where they could go to find out. Ordinary folk were bewildered.

Here was a real job for a newspaper... a job covering war news as it affected Portland civilians. And so, The Journal's WARTIME LIVING NEWS page was born... a feature as unique as the conditions that brought it into being.

The Journal's WARTIME LIVING NEWS department is manned by a special staff that has had to inform itself on problems of business, of industry, of consumers; everything from food to hardware—from wearing apparel to the feeding of livestock and poultry—the operation of railroads and motor truck lines, stages, city buses and private passenger cars.

It covers the news and information emanating from all government agencies including the 23 new war agencies that moved into Portland to handle this city's extraordinary wartime living problems.

Today, merchants phone this group of news specialists for information



to help them plan their future business. Farmers write in, dairymen phone, storekeepers and consumers consult the staff daily... because they know that The Journal's WARTIME LIVING NEWS service is not only alert to current regulations regarding wartime living, but has frequently anticipated future changes.

The WARTIME LIVING NEWS department in the brief two years of its existence has become Portland's outstanding authority on all phases of wartime living for civilians. It symbolizes the spirit of enterprise and service that exists on The Journal. It is an example of how a good newspaper fits into the American way of life. And The Journal is a good newspaper... a warm friendly paper... a paper made up of men and women with ideas and enterprise, whose primary aim is to make each day's paper the best they know how... and next day make a paper that will be even better.

That's why the people of the community prefer it—and they do! The Journal is read by more people in the Portland Area than any other newspaper

...If you lived in Portland you'd read

THE JOURNAL
PORTLAND, OREGON
Afternoon and Sunday

Represented Nationally by REYNOLDS-FITZGERALD
Member: Metropolitan and Pacific Parade Groups

WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation

Increased Civilian Supply

To provide coolers for homes of war workers in hot arid sections of the West Coast, WPB has established a program for the production of certain types of evaporative coolers by issuing Direction 1, Order L-38. . . . All set-aside requirements for brown and milled rice are removed from May 15 through July 31, by War Food Order 10, as amended, which makes the entire output for that period available to U. S. civilians and to complete U. S. commitments to Cuba.

Relaxation of Priorities

Users of cadmium may now maintain a 30-day inventory of cadmium-containing items under WPB Order M-65, as amended, formerly any inventory of these items was prohibited. . . . Under WPB Conservation Order M-9-c, as amended, some copper and copper-base alloy products may be used to replace steel in certain items of extended surface heating equipment, including blast-heating coils, convectors, and unit heaters. . . . WPB Order M-1-g, as amended, provides for wider use of aluminum foil and powder scrap in protective coatings by relaxing restrictions on deliveries by manufacturers and distributors of aluminum paint and pigment. . . . Rapeseed oil may be used without authorization in marine engine oils, heavy-duty engine oils, pneumatic tool oils, and in factice for insulation and the compounding of rubber, through an amendment to Food Distribution Order 35. . . . Controls over the use of rubber tires in manufacturing tank car heaters, pumping boosters, or circulators have been removed from Schedule IX of WPB Order L-217, by amendment to that order, though WPB warns that whether such tires will be available for civilian use will depend on the supply situation.

Retail Food Items

Maximum retail prices for 800 additional food items are being processed by OPA in an expansion of the retail community ceiling price program. Groups 1 and 2 stores only will be affected (those with annual gross sales of less than \$250,000). Approximately half of these stores that are now operating under community pricing will get the new lists during the current quarter, ending June 30.

Cotton Duck Yarn

Beginning May 21, producers of duck yarn are required by amendments to Limitation Order L-99 to maintain weekly produc-

ation and delivery schedules at a rate equal to the highest production achieved in any week thus far in 1944. Producers with extra facilities may receive directives from WPB requiring them to deliver specific additional amounts to designated weavers. Any mill which can't comply with the directive because of manpower shortage or price trouble can appeal to WPB.

Ration Banking

OPA will pay a fixed schedule of fees to banks for handling ration tokens, because present reimbursement payments were not adequate. Fees, retroactive to Feb. 17, 1944, were established after consultation with the American Bankers Assn. Committee on Ration Banking. For each box of tokens included in a deposit or received from nondepositors, the bank may charge 2¢; for each ration check, 5¢; for each box of tokens exchanged by the bank for valid ration evidences, 1½¢; and for each item received in exchange for such a box, 1¢. (Amendment 6, General Ration Order 3.)

Novelty Goods

OPA has released 14 novelty consumer commodities from price control. Unrestricted items include notions (wood hair curlers), household accessories (as table decorations, artificial flowers, wood log carriers, incense burners), some toys, and some miscellaneous articles (as bee feeders, artificial flowers and foods for store display, dog and cat beds and accessories). (Amendment 7, Supplementary Order 45.)

Sugar

OPA has granted a 25% increase in second-quarter sugar allotments to manufacturers of pharmaceuticals to enable them to meet the heavy demand. This action, retroactive to Apr. 1, repeats the increase granted to drug manufacturers for the first quarter. (Amendment 14, Revised Ration Order 3.)

Because of the improved shipping situation and larger sugar imports, the allotment of sugar to twelve classes of industrial users other than drug manufacturers has been restored to 80% of use during the corresponding months of 1941; previous allotments were 70% of base period use. Those affected by this OPA ruling include manufacturers of ice cream, condensed milk, some dairy products, bottled beverages, mayonnaise, products fried in fats (not bakery products), candy, sandwiches, dehydrated soups, canned and bottled foods, products for experimental purposes, and others. (Amendment 19, Revised Ration Order 3.)

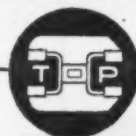
Gasoline

Service stations and other retail establishments cannot increase their ceiling prices for gasoline on the ground that they or their suppliers have added certain substances to the gasoline. Only three classifications—premium, regular, and third grade—apply; no new grade will be recognized unless OPA is given conclusive evidence that the petroleum industry recognizes it as new. Petroleum products for which retail ceilings cannot be



Men and Machines that Shape the Future...

Tomorrow's engineering achievements—faster transportation, better radios, sounder buildings, the wider and greater use of plastics—are on the drafting boards today, projects of post-war planning boards, foreseen by men of vision. With many of these advances Taft-Peirce will be identified, for the Taft-Peirce Contract Service Division combines the skill of experienced designers and master machinists with an extensive array of more than one thousand modern machine tools... a combination that has made hundreds of contributions to better living. The unique facilities of this organization, from drafting room to inspection laboratories, are at your service to assist you in the design, tooling and manufacture of a single part or complete mechanisms in quantity lots. For complete information on how these facilities may serve your design or production department, write for a copy of an interesting illustrated brochure. The Taft-Peirce Manufacturing Company, Woonsocket, Rhode Island.



For Design, Tooling, Contract Manufacturing...

TAKE IT TO TAFT-PEIRCE



AVOID WASTE TIME SPEED UP WITH

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WEBSTER ELECTRIC
REG. U.S. PAT. OFF. 

Graybar Specialists in 86 key cities are ready to show you how Teletalk Amplified Intercommunication can speed up the day's work... smash the bottlenecks created by out-of-date methods.

Let them show you how easy Teletalk is to install... how convenient to use... how closely it can keep you in touch with every phase of your business without leaving your desk.

Teletalk can quickly pay for itself in the times saved in a few months. It is available in types and sizes to fit the needs of both a large or small organization. Teletalk may be supplied with busy signals, annunciators and other special features.

Call your Graybar Specialist today. Let him appraise your needs, advise you on priorities, recommend just the size of Teletalk Amplified Intercommunication System best suited to your individual needs.

Graybar Electric Company, Inc.
Graybar Building, New York City

Offices in Over 80
Principal Cities



determined under the regulation may be priced by the seller with the approval of the district OPA office. (Amendment 3, Regulation 137.)

Imports

The restricted list of articles in General Imports Order M-63, which limited material that could be brought into this country as a gift or for the owner's personal use, has been revised to allow less than \$100 worth to come in this way. Hitherto, the limit was less than \$200. The value of samples that may be imported without authorization is reduced by WPB from less than \$200 to less than \$25. Household goods for the purchaser's own use are exempt from this WPB ruling, which makes numerous changes in Lists I, II, and III of the imports order. (General Imports Order M-63, as amended.)

Imported Watches

Sellers of imported watches are reminded that prices for new models, or for models sold by importers to a new class of purchaser, must be established by OPA. Since prices in some foreign countries have become highly inflated and since increases after Apr. 30, 1943, cannot be included in the suppliers' prices of Swiss watches imported

from countries other than Switzerland in computing the maximum price, retailers and wholesalers are warned to check with OPA on price information before they buy from new sources. Otherwise, they may commit themselves to pay more than they can get under price ceilings in this country.

Tin Cans

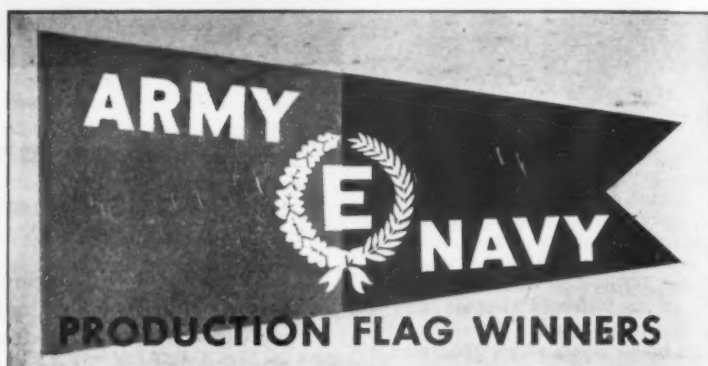
The list of plants which may accept used tin cans has been extended to include smelters engaged in the recovery of tin. WPB permission is not needed to acquire used tin cans with removable closures for re-use in packing any product. (Order M-325, as amended.)

Paper

Restrictions on inventories of converters of pulp, paper, and paperboard have been revised. Hereafter, the limit amounting to a 30 days' supply applies to total over-all quantity of paper, pulp, and paperboard, not to each specific grade. (Order M-241-a, as amended.)

Lard

Lard and rendered pork fat bought and delivered between May 15 and June 30 inclusive may be used without restriction in



American Bridge Co.
Elmira Heights, N. Y.
Arnold, Schwinn & Co.
Chicago, Ill.
Atlas Metal Stamping Co.,
Atlas Tool & Designing Co.
Philadelphia, Pa.
Atwood & Morrill Co.
Salem, Mass.
Aurora Pump Co.
Aurora, Ill.
The Barden Co.
Danbury, Conn.
Binswanger & Co.
Memphis, Tenn.
Carolina Industries
Sumter, S. C.
Cities Service Oil Co.
Hillside, N. J.

Commercial Radio Equipment
Co.
Kansas City, Mo.
Horace E. Dodge Boat &
Plane Corp.
Newport News, Va.
Emsco Derrick & Equipment
Co.
Houston, Tex.
H. J. Freezer Co.
York, Pa.
General Electric Co.
Syracuse, N. Y.
General Motors Corp.
Pontiac, Mich.
Gunderson Bros. Engineering
Corp.
Portland, Ore.

The E. Ingraham Co.
Bristol, Conn.
Jackson Saw Mill Co.
Jackson, Tenn.
Lloyd E. Jones Co.
Chattanooga, Tenn.
Murray & Tregurtha, Inc.
Quincy, Mass.
Rutherford Machinery Co.
Rutherford, N. J.
Square D Co.
Flushing, N. Y.
Sullivan Machinery Co.
Claremont, N. H.
The Rudolph Wurlitzer Co.
DeKalb, Ill.
The Okonite Co.
Passaic, N. J.

Maritime Commission M Awards

General Electric Co.
Lynn, Mass.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

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Mars Can't Afford to Waste Time—Can You?

In this most impersonal war in history, the conduct of war is more personal than ever. The call of the bugle no longer directs the movements of men. Bomber pilots TALK to squadron commanders, squadron commanders TALK to headquarters... advance observation posts TALK to GHQ. Behind the lines—at air depots, warehouses, training stations—everywhere that military might is assembled—messages are TELETALKed. Time wasting messengers and outmoded methods of communication are supplanted by TELETALK Amplified Intercommunication Systems.

That is because Teletalk has been proven for years as the personal way to make sure that orders get to the right person promptly. War found Teletalk exactly geared to the demands of

rapidly growing military and naval establishments, war plants and government offices where busy personnel could not afford any but the quickest and best form of keeping in touch.

You, too, can smash the bottleneck of time with Teletalk... take a tip from Mars and let Teletalk save you from the futility of wasted hours. With Teletalk you merely flick its convenient key and TALK to any key executive.

It isn't magic, it's common sense in these war-busy days. You pay for Teletalk many times over in waiting... waiting... hunting for the man you want. Teletalk brings him to you and you to him NOW, when you want him. Your Teletalk representative is easy to find. Look him up in the classified telephone directory as shown here. Do it now!

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U. S. A. Established 1909. Export Dept.: 13 E. 40th Street,
New York (16), N.Y. Cable Address: "ARLAB", New York City



Let's All Back the Attack—
Buy Extra War Bonds



Licensed under U. S. Patents of Western Electric Company,
Incorporated, and American Telephone and Telegraph Company



WEBSTER ELECTRIC

Electronic inter-communication, paging and sound distribution systems for offices, stores, factories, buildings, institutions, homes and farms.

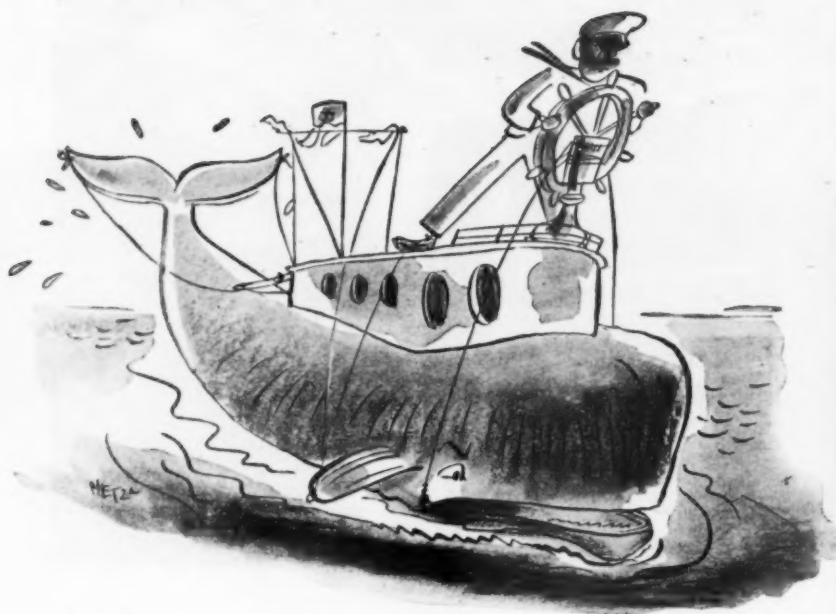
"WHERE TO BUY IT"

GRAYBAR ELECTRIC CO., INC.
601 Salem Ave., West
ROANOKE

Roanoke 8105

WEBSTER ELECTRIC

"Where Quality is a Responsibility and Fair Dealing an Obligation"



MEMO TO: Mr. Jonah

Once there was a man who tamed a whale. He kept it from diving by securing the lateral fins with stays, steered it with reins, made a brake for the tail, built a neat deck and cabin on the back. After a few practice runs, he headed for the South Seas.

The cruise went swimmingly until he crossed some underseas



volcanoes which made the water very hot.

The whale, an Arctic species, began to sweat blubber and shrink. In a week it was so small he had to ride it bareback. When the Clipper rescued him, he was hanging on desperately by the fluke of the tail.



MANY FIRMS with a whale of a business these days are going to be in hot water when reconversion comes. The controls suited to a big business may not function at all when volume vanishes . . . McBee devised methods to show fast growing firms where they were going while they were growing; and can do as much for companies settling down to their former status, or changing to peacetime conditions.

Our business is making the facts of a business available quicker and earlier.

McBee methods and products are custom designed, always simple, easy to understand and use, need no extensive or expensive installations, demand no expert personnel, invariably save time, clerical costs, and worry.

IT might be helpful to see a McBee man, soon. Call our nearest office . . .



THE McBEE COMPANY
SOLE MANUFACTURERS OF KEYSORT

295 Madison Avenue, New York 17, N.Y. . . Offices in principal cities

making soap and edible finished products such as shortening and margarine. Fat bought in this period may be used in soap without regard to quotas, and may be used until Oct. 1 in edible products provided that reports on the amounts bought for this purpose are sent to the Fats & Oils Branch of the War Relocation Authority.



PLANE EXPEDITER

A novel telephone hookup that keeps crane operators and their foreman in constant two-way communication speeds plane production at Boeing Aircraft, Seattle, Wash. The outfit includes a headset and chest transmitter (above) for the "drivers" and an ordinary handset for the supervisor (below) who relays orders to the overhead carriers from the various production departments. Working on high-frequency current impressed on the cranes' power rails, the system eliminates time-wasting shouts and hand signals formerly used by hook tenders to summon the cranes.



Office of Distribution, War Food Administration, on or before July 15. (War Food Order 42, as amended.)
All restrictions on commercial bakers' use of wheat in making bread have been removed for the same period. (WFO 1, as amended.)

Copper Scrap

When a consumer's specifications for copper scrap cannot be met by a seller under existing price ceilings, OPA will fix the purchase price for such scrap. The former premium of 1½¢ per lb. that a seller may add to meet a consumer's specifications for certain types of sales continues in effect; the amended action was taken in order to cover situations where this premium isn't high enough. (Amendment 2, Revised Regulation 20.)

Special Sales

Idle machinery, tools, and other assembled industrial products are now included in the materials covered by the regulation that governs prices of special sales of idle and frozen goods. Previously, it was necessary for the Office of Price Administration to establish prices on such idle goods for each individual seller. (Amendment 2, Revised Regulation 204.)

Other Price Actions

Maximum prices which buyers may pay to suppliers for high-grade veneer logs from the western part of the U. S. (except New England and the Lake states) are fixed by Revised Maximum Price Regulation 313, to prevent use of these logs, which are needed for the production of aircraft and high-grade veneers, in products where lower grades could be utilized. . . . Maximum price ceilings at all levels have been set on better quality rubber heels, at rates ranging from 5¢ to 30¢ higher at retail than previous ceilings (Amendment 4, OPA Regulation 77). . . . Amendment 1, OPA Regulation 54, increases the base price of 4/4" No. 1 common and better grade aromatic red cedar lumber from \$67 per 1,000 b. ft. to \$82, with proportionate increases in other thicknesses and grades. . . . Upholstered furniture and bedding made with used metal coils, used inner-spring units, used inner constructions, and used filling materials must be priced under OPA Regulation 188, amendment 35, which controls these articles when made with new springs. . . . A new method of pricing Maryland tobacco, announced by OPA, sets a top ceiling price of 52¢ per lb. instead of the season-long average price of 52¢ per lb. which was established last week.

Other Priority Actions

WPB is ready to uprate orders for certain repair parts used by the refrigeration industry to AA-1 ratings. Items covered are controls, capacitors, control bellows, solenoid valves, liquid line strainers, refrigerant dehydrators, thermostatic and automatic expansion valves, compressor bodies and repair parts, and others specified.



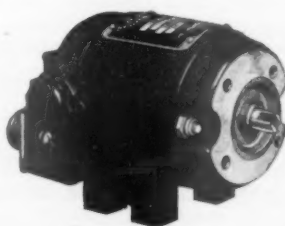
A MOTOR PROBLEM IN DEVELOPING THAT NEW PRODUCT?

HERE are four points that will help you obtain the quality of motor performance so essential for successful product operation. Make sure—

1. That you consider the motor in the *early* stages of product development.
2. That the motor is specially designed for your particular application.
3. That it will be rigidly tested under actual operating conditions.
4. That the motor manufacturer will maintain the high standards of workmanship represented in the sample submitted for testing.

Our many years' experience covering all types of fractional horsepower motors is available to your engineering department.

THE BLACK & DECKER ELECTRIC CO.
KENT, OHIO



THOROUGH ENGINEERING is the basic factor behind the successful operation of this de-icer pump motor and many other special application motors we have designed for all types of equipment.

Black & Decker

FRACTIONAL HORSEPOWER
SPECIAL APPLICATION **MOTORS**

HERE'S THE
HANDIEST TOOL
YOU CAN HAVE IN YOUR PLANT FOR
FAST SAWING!



SKILSAW
MODEL "77"

• There are so many places around your plant where SKILSAW Model "77" can save time, money and manpower... you'll find it the best investment you could ever make! This handy saw goes right to the job, saves material handling, quickly cuts wood, metal, plastics and compositions. It's the fastest tool for ripping up floors, building bins, shelves, partitions... for crating or uncrating without damage to contents.

Ask your distributor for a demonstration on your own work today!

SKILSAW, INC., CHICAGO 30

Skilsaw Tools are sold by leading distributors of hardware, automotive and industrial supplies.

FOR PRODUCTION

IN SHIPPING ROOMS

FOR MAINTENANCE

SKILSAW
PORTABLE ELECTRIC
TOOLS

MAKE AMERICA'S HANDS
MORE PRODUCTIVE!

MARKETING

No Coffee Ration

Talk of resuming sale by coupon is for benefit of growers who are itching for further price increase. OPA is firm.

Reports that coffee will be rationed again stem from the desire of a few importers to build a backfire against demands for higher prices by Brazilian coffee growers.

• **Imports Up 25%**—OPA and the War Food Administration have no intention of going back to rationing. Imports have risen about 25% in the past six months, and if revised quotas under the Inter-American Coffee Agreement are fulfilled, 1944 imports will total 21,000,000 bags (previous quota was 17,500,000). Furthermore the Dept. of Commerce reported stocks of 4,400,000 bags Apr. 30, constituting almost four months' supply.

Growers have been agitating for higher prices on the ground that production costs have risen sharply in the past two years. U. S. officials point out that coffee prices more than doubled within a year after the coffee agreement was signed in 1940 in order to help compensate growers for the loss of their European markets. OPA recently informed the growers, through diplomatic channels, that it would not allow any increase in the price ceilings for green coffee.

• **Trade Has Had Enough**—Coffee sales only recently have recovered from the rationing and postrationing slump, and officials realize that the last thing the trade in general wants is another go at rationing.

The industry confidently predicts that sales this year will top the 1941 peak of 16,609,000 bags (bag equals 132.276 lb. of green coffee). Civilian consumption has run more than 1,300,000 bags a month so far this year. At this rate, the yearly total will be 15,000,000 or 16,000,000 bags, and some 3,000,000 bags going to the armed forces will bring the grand total to something like 19,000,000 or 20,000,000 bags.

• **Postrationing Slump**—Such optimism in the trade is comparatively recent. Its members were as glum last August (rationing was lifted July 29) as packers and canners are now as they watch sales of their meat and vegetables, recently removed from rationing, in slow motion.

August sales fell below those during the rationing period, probably in part because of the stocks which consumers had hoarded, partly because the psychological spur to buying had vanished. The slump was emphasized by the fact that summer sales of coffee are traditionally low; and even the Pan-American Coffee Bureau's vigorous iced coffee promotion failed in its effort to boost sales as it had succeeded in doing in previous summers.

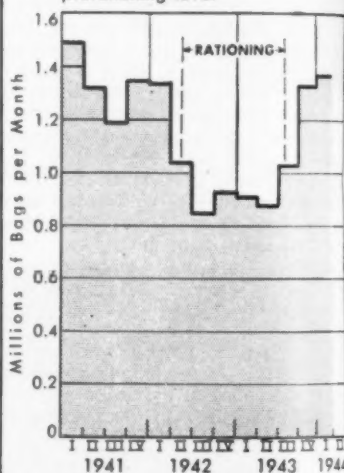
Within two months, however, sales were considerably higher than during the rationing period. But they approached pre-rationing levels more slowly. Some segments of the trade have not yet recovered.

• **Expensive Brands Boomed**—Hardly hit probably have been the low-price brands of chain distributors. The private brands of the Great Atlantic & Pacific Tea Co., the nation's largest seller of coffees, lost heavily to more expensive brands during rationing; and this slump has been slow to reverse itself. Coffee sales of another national grocery chain are still running 9% below pre-rationing levels.

More expensive brands, on the other hand, showed phenomenal gains during the nine months of rationing; and sales

COFFEE COMEBACK

Civilian consumption approaches pre-rationing level



Date: OPA, Commodity Research Bureau.

© BUSINESS WEEK

Purveyors of other commodities now suffering postrationing slump can derive some hope from the recovery staged by coffee sales which fell off immediately after rationing, but now approach an all-time high.

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Melting Steel

IN THE WORLD'S LARGEST VALVE PLANT

HERE in the steel melting department at the Crane Chicago Works, valves and fittings are being born.

These large electric furnaces are charged with their load of ingots, scrap metal and alloying agents. Capacities range from 2000 to 20,000 pounds. Under the impact of 11,000 amperes this charge is reduced to a white hot liquid. Out it pours into the ladle on its way to the casting floor at an average of 24,000 pounds per hour—to be transformed into valves and fittings.

The capacity of the world's largest valve

manufacturer, for such quantity production, is standing the nation in good stead when valves and fittings are so widely needed in every phase of war production.

Tomorrow these quality valves and fittings, backed by the latest engineering developments—the newest manufacturing know-hows, acquired in intensive war production, will be devoted to furnishing valves and fittings to an America at peace. CRANE CO., General Offices: 836 South Michigan Avenue, Chicago 5, Illinois.

CRANE

**VALVES • FITTINGS • PIPE
PLUMBING • HEATING • PUMPS**

have receded very slightly, if at all, from this level.

• **Spectacular Shifts**—No nationwide data for postrationing brand preferences are available, but local studies show spectacular shifts.

The Milwaukee Journal's consumer analysis shows that the number of Milwaukee families buying A. & P.'s lowest priced brand, Eight O'Clock, dropped from 30.1% in 1942 to 11.9% in 1943 during rationing, and has come back to only 14% this year.

Hills Bros., a higher-priced brand, took top sales place from Eight O'Clock in 1943 when it was purchased by 44.1% of the city's families. This compares with 22.7% in 1942, and 40.2% in the postrationing year 1944.

Milwaukee's third and fourth choices, Maxwell House and Bokar (Bokar is A. & P.'s highest-price brand), also benefited from rationing in Milwaukee. Maxwell House, favored by only 6.9% of the families in 1942, was chosen by 9.8% in 1943, and 9.4% in 1944. Bokar represented 2.8% in 1942, jumped to 7.5% in 1943, rated 6.9% this year.

• **Advertising Brands Gain**—In New York City, the World-Telegram, which

carried advertising for three of the highest priced brands distributed in that area during rationing, surveyed the trend of coffee sales. The three brands showed sales increases of 234% (Martinson's), 94% (Savarin), and 46% (Yuban), respectively.

According to the World-Telegram survey, all advertised brands constituted 60% of all New York coffee sales before rationing, and this figure rose to 73% during rationing.

• **Higher Incomes**—Some of this uptrading, of course, may be chalked up simply to higher consumer incomes, and the higher percentage of income which goes for food when durable goods are not available.

But the fact that shifts follow the rationing dates so closely, plus the fact that most of the rationing and postrationing trends have already showed some slight reversal, as in the Milwaukee market, indicate that the coupon system must be considered largely responsible.

The high level of consumer buying power has, of course, enabled the high-priced brands to hold a big share of their gains.

Packers Cleared

Government withdraws antitrust charge against dealers in fat lambs, but urges another checkup in the future.

The government has dropped its "lambs" antitrust case in Denver against the Swift, Armour, and Cudahy packing companies, the Denver Union Stockyards Co., and 28 other defendants engaged in buying and selling lambs in the Denver market.

• **Criticized by Court**—U. S. District Judge J. Foster Symes, who dismissed the original indictment (BW—May 4, p. 74), blasted the Antitrust Division, saying it withdrew the litigation, for bringing suit on the criminal side rather than the civil side of his court and thus "branding the defendants as criminals."

George B. Haddock, present regional director of the Antitrust Division in Denver (he was not in charge when the original indictment was brought), moved for dismissal, saying that the case was brought after investigation of transactions from 1935 to 1940, and that "subsequent investigation has shown that conditions from 1941 to 1943 differ considerably." Haddock added that the government could not now prove beyond a reasonable doubt that there is any present injury to producers of lambs or the consuming public, any undue restraint of interstate trade.

• **Review Proposed**—He suggested a review in the future to see if under more normal conditions in the marketing of lambs a restraint of trade may exist.

The case centered on the system by which buyers of lambs allegedly took turns in bidding for those brought to market.

After Judge Symes dismissed the original case, the Antitrust Division appealed to the Supreme Court which refused to review it and remanded it to the Circuit Court of Appeals in Denver. Instead of proceeding with this case, the Antitrust Division brought a new one—the one which Judge Symes dismissed at the government's request.

HALF-A-LOAF AD POLICY

The Chicago Tribune last week adopted a split-run policy on help wanted classified advertising whereby each advertisement runs in exactly one-half of the total number of copies printed, with an appropriate rate reduction.

The Tribune attributed the policy to the newsprint shortage and a 581% increase in help wanted advertisements



CIRCUIT RIDER

Stocking a wide variety of men's and women's clothing, a mobile merchant-dispatching unit (above) travels a three-county circuit in West Virginia to bring quality goods and latest fashions to coal miners and their families. Operated by the Island Creek Coal Co., the "fashion trailer"—complete with sales force—was put into service in 1937 as a house-to-house unit, but suc-

cess changed operational procedure. Now it's used largely to supplement the inventories of small company stores in 20 isolated communities which are within a 65-mi. radius of the main warehouse at Holden. Visiting each store once a month with its line of 100 men's suits, 150 dresses, fur coats, and sports attire, the unit serves an estimated 20,000 adults while it rings up sales that range from \$2,000 to \$4,500 a week.

1941, basing date of newsprint

an exception to the new policy is a column classified section headed "day's Most Urgent War Jobs" in which 16 war plants each get a 24-in. column box ad which runs in all papers. The Tribune is guided in part by the selection of the lucky 16 by the Manpower Priorities Committee which supplies Chicago newspapers with a list of war plant labor priorities for guidance in allotting limited space. Chief disadvantages of the policy are that if you are an advertiser and pick up one of the papers in the first half of the run (identifiable by the letter X), you have to get paper from the second half of the run (identifiable by the letter Y) to see your ad was published. If you are a hunter, you have to get both an X and a Y paper to see the ads of all jobs offered.

The policy applies only to papers printed for home and suburban distribution, as no help wanted ads are carried in editions distributed more than 25 miles from Chicago. The rate adjustment means that for one insertion daily cost per line is reduced from 75¢ to 50¢ weekdays; from \$1 to 75¢ on Saturdays, with appropriate adjustments for large contracts.

Barriers Down

Blue Network sells time for Town Meeting of the Air on sponsored basis for discussion of controversial questions.

For some years the question of selling time for radio programs which discuss controversial questions has been a controversial question in itself.

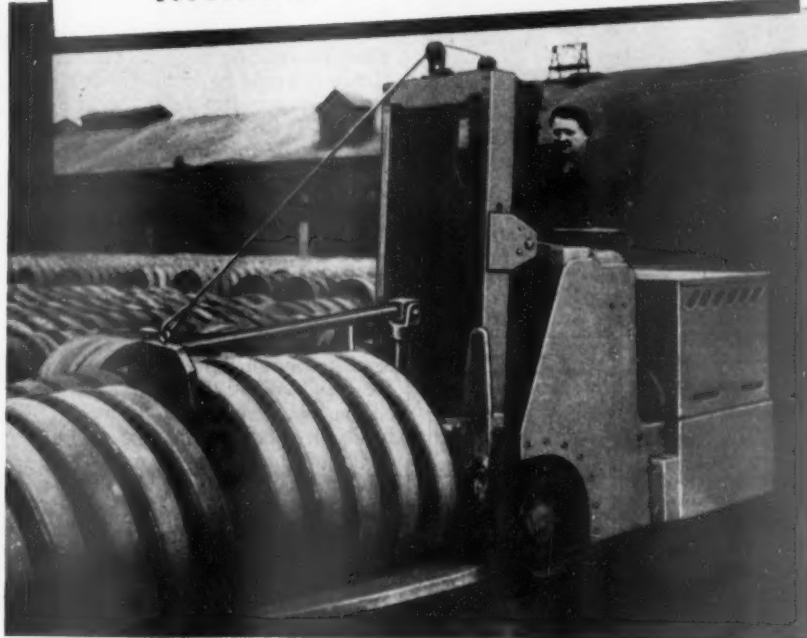
Opposed have been the networks, the National Assn. of Broadcasters, James H. Fly, chairman of the Federal Communications Commission, and, more specifically, certain members of New York's Town Hall board of trustees, who last week approved sponsorship of America's Town Meeting of the Air by the Reader's Digest Assn.

Town Hall Controls—Protests were launched by a contract provision which gives exclusive control of the program to Town Hall. Reader's Digest Assn. agreed to a hands-off policy in the deal under which it will sponsor the program for 13 weeks of the year at a cost of about \$1,000,000 for time and program. The show will be aired for 13 weeks by the Blue Network on a sustaining basis as has been for the past nine years.

When sponsorship begins Sept. 7,

NO PRODUCTION LAG

...THANKS TO ELECTRIC TRUCK



How New Methods Save Over \$100 a Week

You can profit from the wartime experience of other executives who have learned first hand how to prevent production lags and to save money by using battery electric trucks. These effective tools do more work with less manpower.

Take the case of a plant where the high production level of vital wheels for railroad cars was threatened by a shortage of wheel rollers.

The problem was solved by using an electric fork truck which picks up five car wheels at a time and carries them to storage. This also saves \$112.50 every week in overtime.

The electric truck does more than prevent a lag in production. It eliminates the hazards of material handling which are the cause of so many industrial accidents.

Executives of many other companies are discovering through wartime necessity how modern methods of material handling can speed production and cut costs.

You, like they, can improve your postwar competitive position by taking advantage of the many benefits only a battery electric truck can give. Your inquiries are invited.

To keep abreast of latest developments:

FOR MANAGEMENT: "Unit Loads"

Bulletin explaining a coordinating materials handling system that involves practically every industry.

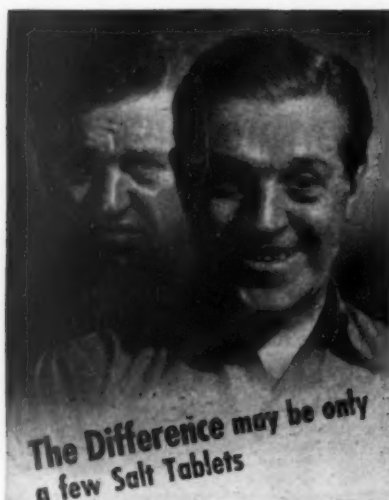
FOR TRANSPORTATION SUPERVISOR:

"Material Handling" Handbook containing vital information necessary to the conduct of efficient inter-department operations.

THE INDUSTRIAL TRUCK STATISTICAL ASSOCIATION
208 South La Salle Street • Chicago 4, Illinois



MANUFACTURERS OF TRUCKS: AUTOMATIC, BAKER, CRESCENT, EASTON, ELWELL-PARKER, LEWIS-SHEPARD, MERCURY, YALE. BATTERIES: EDISON, EXIDE, PHILCO. BATTERY CHARGING EQUIPMENT: ELECTRIC PRODUCTS, HERTNER



.. and they cost less than 1 cent a man per week

Proper body tone requires salt. Loss of salt through sweat can easily change an alert, comfortable worker to one who is miserable, careless.

Loss of salt dehydrates the body, thickens the blood. The results are Heat-Fag, inalertness, accidents, heat prostrations.

The preventive is water and salt. Water alone won't do it. Under hot, "sweaty" conditions water alone dilutes the blood and causes heat cramps.

Industrial physicians with America's greatest manufacturing plants have found that the easy, simple, economical way to provide essential salt is Morton's Salt Tablets at every drinking fountain. A tablet with every drink of water is all that's necessary to prevent Heat-Fag, heat cramps, heat prostrations — to keep workers alert, at peak production.



MORTON'S
Heat-Fag
SALT TABLETS



QUICK DISSOLVING
(Less than 30 Seconds)

This is how a Morton's Salt Tablet looks when magnified. See how soft and porous it is inside. When swallowed with a drink of water, it dissolves in less than 30 seconds.

Case of 9000, 10-grain salt tablets - - - \$2.60
Salt-Dextrose tablets, case of 9000 - - - \$3.15

MORTON'S DISPENSERS

They deliver salt tablets, one at a time, quickly, cleanly — no waste. Sanitary, easily filled, durable.

800 Tablet size - - - \$3.25

Order from your distributor or directly from this advertisement . . . Write for free folder.



MORTON SALT COMPANY, Chicago 4, Ill.

the Blue Network will increase the Town Meeting network from 133 stations to more than 170.

• **Available Two Years**—Sponsorship of such public forum programs has come up before, always to be turned down on one count or another. The Chicago Round Table program, for example, would sacrifice its subsidy from the Sloan Foundation by going commercial. Hence it would be in the lurch if commercial sponsorship did not work out.

The Town Meeting program has been for sale for two years, but potential sponsors were turned down by either the network or the Town Hall trustees. Reported recent bidders for the program have been the New York Stock Exchange, Newsweek Magazine, and Goodrich Tire & Rubber Co.

• **Holds Thursday Spot**—Trustee Norman Thomas has consistently voted against sponsorship of Town Meeting. He approved the Reader's Digest Assn. contract last week, however, when the hands-off policy was incorporated.

Commercial sponsorship will freeze the program on its Thursday at 8:30 p.m. (EWT) spot as well as assure complete coverage of the full network. The contract will run three years, with optional renewals.

CHARGE PLAN FLOPS

Sears, Roebuck & Co. is still puzzled to know why its telephone charge account experiment never clicked.

Eighteen months ago, the company notified 200 long-time catalog customers in Chicago's north shore suburbs that orders of \$2 or more telephoned in (charges collect) would be shipped parcel post and billed on open account (BW—Nov. 14 '42, p77).

Sears hoped to hold suburban delivery customers who previously had paid the truck driver on delivery and who might be lost if and when delivery tires should be unobtainable.

Sears has not promoted the telephone charge accounts, and, despite the obvious convenience, only 12% of the 200 took advantage of the offer. These few did not increase their purchases. Lack of hard lines such as hand tools is a possible reason. Also, the suburbanites on the list include few with war-swollen incomes.

Unless telephone charge account business picks up by year's end, it may be dropped.

EASES TELEVISION RULE

Compromising with the National Broadcasting Co. on a petition filed last February, the Federal Communications Commission last week amended television regulations to allow a single cor-

poration to own or control five stations. Previous limitation had been five. NBC sought seven commercial outlets in its petition.

Owned and operated radio stations paid the bill for network radio in years before it reached a profitable basis—and FCC has said that in granting more than one television license to a company the development of a nationwide telecasting system will be an important consideration.

OPA WINS ANOTHER

The U. S. Supreme Court's decision this week upholding OPA's power to issue suspension orders prohibiting ration regulation violators from dealing in rationed commodities may stir congressional opposition just when OPA thought a pending bill to extend its life would have easy going (BW—Apr. 22 '44, p17).

Business generally regards suspension orders as one of the harshest and most punitive of OPA's enforcement devices. There is strong support for amending the pending OPA extension act to curtail OPA's power to issue suspension orders.

The court's decision, handed down in the case of a Washington (D. C.) fuel oil dealer whom OPA had forbidden to handle fuel oil from Jan. 15, 1944 until Dec. 31, 1944, was 8 to 1—Justice Owen J. Roberts dissenting. The division indicates that the court was not beset by any doubts in arriving at its decision.

Another important court decision let OPA on the fence this week. In a 4 to 4 split, the Michigan Supreme Court affirmed a lower court ruling (BW—Oct. 16 '43, p92), which barred OPA from setting price ceilings on machinery and machine tools sold in receivership. The case involved sale of the assets of the Leisner Mfg. Co. of Detroit.

Since OPA believes industrial demobilization will make the question of its pricing authority over used machinery and machine tools an important one, the agency probably will appeal to the U. S. Supreme Court.

ENTERPRISE IN JOLIET

The Joliet (Ill.) Herald-News is all set and ready to go with a "Victory Edition" to be published the day Germany surrenders. Advertising space has been sold, copy prepared, and editorial matter outlined.

Institutional advertising copy will predominate. Typical copy urges war workers to remain on their jobs until Japan also surrenders. News columns will cover personalities in the war news, and feature articles of an historical nature.



Why are soldiers' rations
packed in CANS?

Because you can't beat
STEEL for protection!



When it comes to protection, you want the best. In steel, supplies it. Steel will also give it to you when peace comes. Steels that are stronger, tougher, better. Steels developed to meet war needs. You'll meet these steels in products of all kinds . . . from containers to cooking utensils. They'll be backed by 174 laboratories of United States Steel. The U-S-S Label is your guide to quality steels.

UNITED STATES STEEL

• AMERICAN BRIDGE COMPANY • AMERICAN STEEL & WIRE COMPANY •
• CARNEGIE-ILLINOIS STEEL CORPORATION • COLUMBIA STEEL COMPANY
• CYCLONE FENCE DIVISION • FEDERAL SHIPBUILDING & DRY DOCK
COMPANY • NATIONAL TUBE COMPANY • OIL WELL SUPPLY COMPANY •
• TENNESSEE COAL, IRON & RAILROAD COMPANY • TUBULAR ALLOY STEEL
CORPORATION • UNITED STATES STEEL EXPORT COMPANY • UNITED STATES
STEEL PRODUCTS COMPANY • UNITED STATES STEEL SUPPLY COMPANY
UNIVERSAL ATLAS CEMENT COMPANY • VIRGINIA BRIDGE COMPANY

LABOR

Coal Pact O.K.'d

NWLB's approval of the Lewis-Ickes pact clears path for speedy return of affected mines to private management.

Hope of settling the coal wage controversy was brighter this week than at any time since Mar. 10, 1943, when John L. Lewis presented his original demand for a \$2-a-day wage increase. But prospects of one short fight before the end remain.

• **What About the South?**—National War Labor Board approval of the contract between 70% of the industry and the United Mine Workers cleared the way for the return of the affected mines to their owners. But it left unsettled the wage dispute involving the other 30%—principally the southern coal operators led by former Sen. Edward R. Burke, president of the Southern Coal Producers Assn.

The Administration is hoping that disaffection in Burke's ranks will break his resistance to the 70% pact. Some operators who own northern and southern properties are expected to accept the pact for their southern mines now that it has been approved for the North. Others may hold out. Prospects are that the government will try to persuade the southerners to give in to reclaim their properties and avoid losses from further tie-ups.

• **Portal-to-Portal Pay**—The coal pact continues the present method of paying miners on a portal-to-portal basis which was adopted last November in the agreement signed by Secretary of Interior Harold L. Ickes and Lewis to govern federal operation of the mines.

The miners will receive, in addition, a flat bonus of \$40 each in liquidation of a retroactive liability which accumulated between Apr. 1, 1943, and last November.

For a nine-hour portal-to-portal day underground—including 15 minutes of lunch period, an assumed 45 minutes of underground travel time, and an assumed eight hours of work time—the miners receive \$8.50, compared with the \$7 they received for seven hours work underground, exclusive of travel time and lunch time under the contract which expired Apr. 1, 1943.

• **Travel Data Requested**—In approving the Ickes-Lewis pact, NWLB stated that it would need data to back the

travel time assumption before accepting the same pact for private operation. The data, provided by two partial reports of a special presidential travel time committee, showed that the travel time had been understated by almost twelve minutes. But NWLB decided to forget the discrepancy in the interest of harmony.

• **Avoiding Lawsuit**—The government hopes to get out from under federal operation with a minimum of damage suits from the owners.

About 1,500 mining companies gave the government unconditional waivers at the outset of government operation in return for the privilege of managing their properties as they pleased. Another 375 companies gave conditional waivers, reserving some specific point on which they were required to keep books for the government.

The remaining 125 companies failed to grant any waivers to the government. They will have to give the government

a complete accounting for the period of government operation before they can recover their properties.

• **"Purely Nominal"**—Generally, companies in a sound profit position gave unconditional waivers. The money was recovered in the U. S. Court Claims after seizure is terminated.

The government believes that this minority has no case. Government operation was purely nominal, except to the extent that wages and prices were dictated. Under the existing emergency setup, wages could have been dictated by NWLB and prices by OPA without government seizure, federal lawyers contend.

TYPOS VOTE ON A.F.L.

Indications are that the International Typographical Union soon will negotiate with the A.F.L.

Unofficial returns on a balloting will not be completed until some time in June record 24,650 members in favor of returning to the fold and 14,000 opposed.

James J. McGrath, secretary-treasurer



CLOSE HARMONY

Henry J. Kaiser's latest influential admirer is Philip Murray (left), in whose company he recently visited the White House for a conference on labor-industry postwar planning. Although only 5% of Kaiser enterprises are under C.I.O. contracts (the rest are A.F.L.), relations are so amicable that Murray set a precedent at his steelmakers' convention (BW—May 20'44,p93) by having Kaiser as the union's first guest speaker from industry. Kaiser brought down the house

there by announcing the signing of a contract covering his new Fontana (Calif.) steel plant. C.I.O.'s steel plant considers the contract the most favorable it holds. Calling for a "union shop—plus," the agreement promises Kaiser special dividends in helping to lick the basic manpower shortage problem. Determined to demonstrate that it pays an employer well to record the union generous treatment, the C.I.O. will use its entire apparatus to secure sufficient labor of high enough quality to make the Fontana operation efficient and profitable.

But the thing to do with this magazine (after reading it) is give it to your local Waste Paper Drive. The need is so great, and manpower so scarce, there won't be enough paper for Uncle Sam and you too . . . unless you help:



Explore your attic. Dig into those piles of old magazines. You never know what may turn up in an attic. We even found \$1000 in gold — or Grandpa's Taylor Therometer (we've been making 'em since 1851).



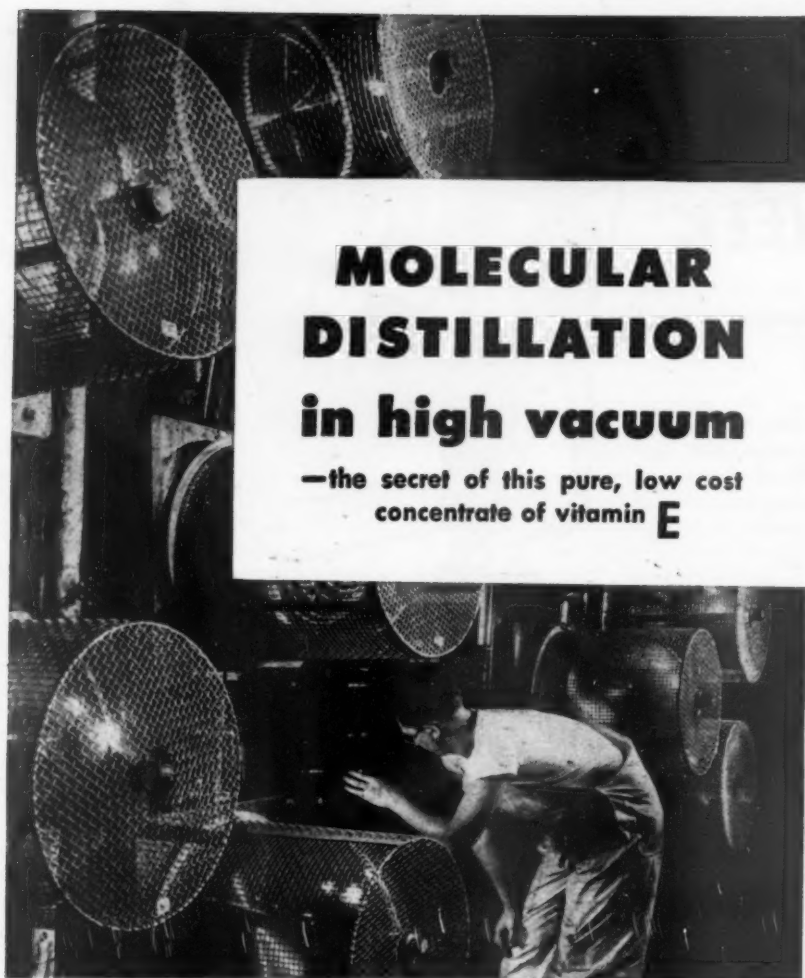
3 Join the Boy Scouts in a neighborhood paper hunt. Tell 'em it's not unpatriotic to get paid—if they can. And cut down on your own use of paper at home and at work. We've *all* got to make a 75% supply do a 100% job.



Reduce your blood pressure by doing something about the war instead of just worrying about it! (Doctors note: for quick, accurate blood pressure readings, can't beat our Tycos Aneroid Sphygmomanometer.)



5 What are we doing? Our instruments are helping paper mills turn out all the paper they can—besides working overtime for the armed forces and war industry. Taylor Instrument Companies, Rochester and Toronto.



MOLECULAR DISTILLATION in high vacuum

—the secret of this pure, low cost
concentrate of vitamin E

*Some of the high-vacuum molecular stills which
produce Vegol. Torkel Korling photograph.*

VITAMIN E is acquiring stature. As new evidence appears, indicating this vitamin's true place in the picture, E is being incorporated in more and more multi-vitamin products.

We believe that our Vegol (concentrate of natural mixed tocopherols) is, by every comparison, the finest concentrate of vitamin E on the market. It is pure. It is bland. It

is stable. It is unusually low in cost.

The reason for this superiority is the method of production, DPI's unique molecular distillation in high vacuum. This high-vacuum technique is also the secret of the leadership now enjoyed by DPI's concentrates of vitamin A.

When you begin to plan vitamin fortification for your products, you will find us ready and eager to serve.

Distillation Products, Inc.



Pioneering High-Vacuum Research

755 Ridge Road West, Rochester 13, New York

*"Headquarters for Oil-Soluble-Vitamins
and High Vacuum Equipment"*

of New York's strong "Big Six" which last week voted 2,368 to 2 for reaffiliation, described the chance of an affirmative vote as "very probable" since the returns received from leading locals in large cities showed the opposition to reaffiliation had been strong. The union has a total membership of about 85,000.

The typos left the A.F.L. in following a quarrel over a 1% assessment levied to build up a war chest to combat the C.I.O. Subsequent conferences ironed out the dispute, the A.F.L. dropped the assessment, in two previous polls the union rejected bids to return. Last November the proposal was defeated by 11 votes.

Woodruff Randolph of Chicago, present secretary-treasurer of the national union, is slated to be the president, replacing Claude M. Baker of San Francisco. Returns from locals give Randolph 22,975 votes against 13,941 for Baker.

Illinois Enigma

Edmundson speaks up
U.M.W. rank-and-file supports
and his rebellion may be more
than a bid for autonomy.

Whether the object of Ray Edmundson's rebellion in the Illinois District of the United Mine Workers is the announced "district autonomy" or whether it is a political maneuver calculated to make him popular with the rank and file so that when a union election is held he will be voted into the presidential job he has long held by J. L. Lewis' appointment, is the question that is agitating Illinois coal diggers.

• **Calls Meeting**—Edmundson over the week end broke the silence he has maintained since his spectacular and mysterious resignation as president of U.M.W. District 12 (BW—May 13'44, p.90) by calling a meeting of the international executive board at Washington and his return to the pits as a miner. In a radio broadcast he called on every Illinois local to send delegates to a statewide rank-and-file meeting at Springfield on June 1.

Sponsored by a committee for autonomy and self-government, the meeting, as announced by Edmundson, a vice-chairman, is to "explore the possibilities of a reform movement in District 12." What happens at that meeting may provide the answer as to whether Edmundson is after.

• **No Open Attack**—Four other rank-and-file leaders joined Edmundson in his bid for support of his movement.

government and autonomy, in the
of a declaration by Hugh White
is-named provisional president of
District 12 to replace Edmundson) that
meeting is in violation of the inter-
national constitution of the U.M.W.
careful not to come out in the open
an attack on Lewis personally, Ed-
mundson, in his radio speech, con-
fessed that for six years District 12 has
asked the international executive
board in Washington for the return of
autonomy and local self-government.
That the district is no longer in
to the international union, he
stated that the district treasury, still
under the control of Walter J. James,
the Lewis-appointed provisional
president, now holds over \$1,000,000 cash.
Shipped of Rights—Significant also
in this oblique bid for support from
the districts implied in his statement
that 21 of the 31 districts are denied
the right of self-government under pro-
visional rule by the executive board.
More than 125,000 of the union's 650,
000 members, it is estimated, have the
right to elect their own district officers
and manage their own affairs, including
the determination of union dues and
the disposition of their funds.
Since espousing autonomy, Edmund-
son has become popular with the rank
and file in Illinois, though how far he
will want to carry them in revolt
against Lewis is not known. Strength-
ning Edmundson's position is the
miners' resentment against eleven years
of having their officers imposed upon
and their affairs administered
by Lewis' office.

How of Strength—Only straw in the
wind so far by which to gage the suc-
cess of Edmundson's move was the
suspension of work at a mine near
Ingfield, when 300 miners on May
conducted a demonstration of "coop-
eration" for their president, Pete Raf-
ferty, who is one of Edmundson's
supporters.

Operators meanwhile are silent. They
have got along with Edmundson as
provisional president, and it was regarded
as significant that the Peabody Coal
Company, leading Illinois coal operators, so
promptly hired Edmundson after his
election.

Tells of Job Refusal—Reports that
Edmundson would take a labor rela-
tions job with a big coal company were
checked, however, when Edmundson,
in his radio speech, claimed that he
had rejected a \$15,000 a year offer from
a coal company because he said that
he felt that it would not be fair to
use his knowledge against his lifelong
associates, the miners. He added that
he felt that the offer had some con-
nection with those who wished to see
him eliminated from the U.M.W.

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Sawmills Close

Lumber workers rebel in the Pacific Northwest against NWLB rejection of demand for a general wage increase.

The National War Labor Board had another hot potato on its hands this week—the rebellion of Pacific Northwest lumber workers, both A.F.L. and C.I.O., against the board's rejection of their demands for a general wage increase.

• **Lost at Every Turn**—For 16 months the A.F.L. Northwestern Council of Lumber & Sawmill Workers and the C.I.O. International Woodworkers of America have been prosecuting the wage demands, to an obligato of flash strikes as the demands fell flat, first at the collective bargaining table and then before the West Coast Lumber Commission (BW—Apr. 1 '44, p88).

The reaction of sawmill workers in Seattle was prompt last week when NWLB, having superseded its lumber commission, decided that wage increases would not solve the one big problem—manpower shortage—which persuaded the War Production Board and the War Manpower Commission

to certify the case for NWLB consideration.

• **Strike Spread Feared**—Within hours, four of the mills were closed. 800 workers were absent from their jobs. What worried NWLB no less than its sister agencies in the war production family was that the strikes might spread. In a few days, 15,000 men were out and their ranks were growing. The Northwest pine and fir industry spans across the states of Washington, Oregon, Idaho, and Montana, and the northern part of California. The industry employs upwards of 100,000 workers.

For if the manpower supply was critical before the wage demands were turned down (this is a premise on which the lumber operators disagreed), it was certain to grow steadily more critical as the workers dropped the jobs paying 80¢ or 90¢ an hour and drifted to the shipyards to take jobs paying \$1.20.

• **"Rare and Unusual"**—The A.F.L. asked for an increase to \$1.05 an hour, the C.I.O. to \$1.02½. The West Coast Lumber Commission, established by NWLB (BW—Jan. 30 '43, p80), held that any increase would be incompatible with wage stabilization. NWLB took the same position, but accepted jurisdiction over the controversy as a "rare and unusual" case.

For Better Union-Public Relations

Carl Euloah Riblet, Jr. ("I use my middle name because it's pure Cherokee and most people ask about it"), proved that his venture into the field of public relations counseling for unions was no freak by closing a deal with a second important labor organization this week. Riblet's original labor client is A.F.L.'s formerly racket-ridden Building Service Employees Union; his second is C.I.O.'s United Retail, Wholesale & Department Store Employees, currently engaged in backing its Local 20 in the Montgomery Ward dispute.

Riblet's job for the C.I.O. unit will, for the first 60 days, be devoted to Montgomery Ward. He plans a radio program "strictly commercial in makeup with union plugs confined to institutional announcements." Once the Ward case is finished, Riblet will get on with the direction of a long-term public relations program for the U.R.W. & D.S.E.

In addition to his union clients, Riblet, whose headquarters are in Chicago, directs public relations for the architectural firm of Holabird &



Root, for United China Relief, and—sharply contrasting with the philosophy of his labor accounts—he has recently undertaken the handling of special projects for the National Tax Equality Assn.

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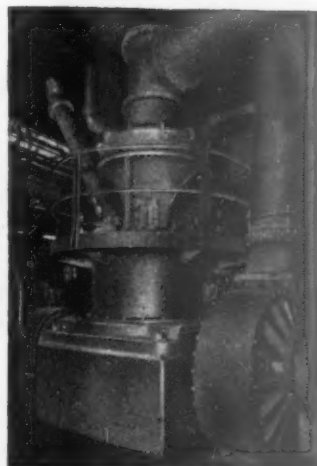
The C-E Raymond Mills installed for this purpose up to the present time are capable of grinding about 50,000,000 tons of coal annually — the capacity of a million standard coal cars. Were a train to be formed of these cars, it would stretch around one-third of the earth's circumference—from New York to Bombay.

The development of pulverized coal firing and its application in the field of steam generation are largely responsible for the unprecedented progress made in that field during the past 25 years. The

large high-pressure, high-temperature steam generating units of today — some capable of producing sufficient steam to generate all the electricity for the domestic requirements of a city of over 1,000,000 population — owe their very existence to the successful development of pulverized fuel firing.

These 1,000,000 coal cars with their 50,000,000 tons of coal are evidence of the major role taken by Combustion Engineering in pioneering and perfecting this modern method of coal firing. The successful commercial application of this development initiated a chain of improvements in the whole steam generation field that have helped the utilities to meet the nation's vast electrical demand, and with two-thirds less coal.

A-797



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U. A. W. Steps In

Executive board brings Chrysler strikes to close, but is worried lest serious grievances prove harder to control.

C.I.O.'s United Automobile Workers, never noted as a highly disciplined organization, is gravely concerned over the effect of war weariness on its more than a million members. Washington and the firms under contract with U.A.W. share the union's concern; for long hours of work, the unsomeness of wartime shortages, and an accumulation of tensions are inflating what would otherwise be routine implant grievances into causes for strikes.

• **A Byproduct**—Such a minor friction was responsible for the Detroit Chrysler walkout which threw 6,500 war workers into idleness and rippled out to close the Highland Park plant employing another 5,000.

The strike arose as a byproduct of a jurisdictional dispute of the Dossin Food Products Co., but union officials said that in part it grew out of a succession of unsolved grievances.

• **C.I.O. vs. A.F.L.**—The Dossin situation, settled last week, began in January when an A.F.L. teamsters' union contract expired. Bargaining rights were claimed by the C.I.O. United Retail, Wholesale & Department Store Employees.

When these were denied, the C.I.O. union called a strike at Dossin. This strike was settled last week by agreement to submit the dispute to a National Labor Relations Board election.

• **Driver Bounced**—The day before this settlement, a teamsters' union member attempted to deliver Dossin's Pepsi-Cola to the Highland Park Chrysler plant. He was ousted from the plant by two U.A.W. shop stewards.

Chrysler supervisors discharged the stewards. Others then joined in ejecting the supervisors from the plant. As a result, the company discharged 14 more persons, precipitating a strike.

• **Hard to Hold**—That it took all the pressure U.A.W.'s executive board could bring to bear to get Chrysler employees back to work was considered significant. It suggested that when more serious grievances come along, U.A.W. will be pushed to the breaking point to hold its members in line.

KEN-RAD SUIT STANDS

The labor controversy in the Ken-Rad Tube & Lamp Corp. case was settled this week when the company

and A.F.L.'s auto workers union negotiated a wage agreement that got National War Labor Board approval, but the legal question raised by U. S. seizure of the Owensboro (Ky.) plant is still scheduled for judicial determination.

NWLB's action in approving a 3¢-an-hour retroactive wage increase for the company's 4,000 employees liquidates the dispute that led to government seizure (BW—May 6 '44, p101) and paves the way for a quick return of the property to private management. But Ken-Rad has shown no disposition to call off the court proceedings which were launched to challenge the President's seizure power.

If the litigation goes ahead, the now-famous Section 3 of the Connally-Smith War Labor Disputes Act will be submitted to the U. S. Supreme Court for scrutiny. This section of the law and its meaning is at issue in the Montgomery Ward case (page 15) where a court test was blocked in Chicago when the government withdrew its injunction suit and returned the properties to company management (BW—May 13 '44, p19). Empowering the chief executive to take over property equipped for "manufacture, production, or mining," Section 3 is called unconstitutional by Ken-Rad, inapplicable to the mail-order business by Montgomery Ward.

Token Offering?

Independent unions fail to get full board representation, but NWLB offers them liaison officer to answer questions.

The National War Labor Board stuck to its guns and continued in its refusal to give full board representation to independent unions, but it has offered them a liaison officer instead (BW—Mar. 18 '44, p19).

• **Independents Displeased**—The action was unsatisfactory to the independents, who may be expected to use the first opportunity to renew their pleadings for full recognition.

The board outlined a five-point program for handling the problems of independent unions and then advised Chairman Elbert Thomas of the Senate Labor Committee that they would grant representation to the independents only if it were shown that board members affiliated with the A.F.L. and C.I.O. were not serving their interests adequately.

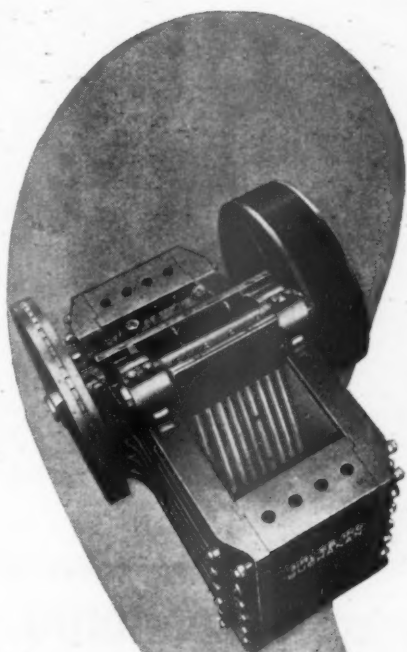
• **Five Points**—The program included:
(1) Henry J. Meyer, chief of the

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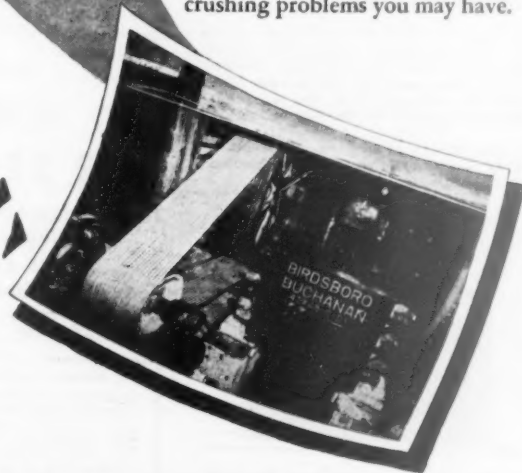
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• **BIRDSBORO-BUCHANAN** Deep-Frame Crushers were selected to speed ore production in vital Adirondack mountain mines. The depth of the frame and the exceptional length of the crushing surfaces, make it possible for these crushers to close down to 4 1/2" to 5" yet produce from 300 to 400 tons per hour.

These crushers, which mark an important advance in crusher design, are another outstanding example of Birdsboro engineering skill at work. This particular type is available in sizes ranging from 36"x 48" to 48"x 60". We'll be glad to send you full details on these crushers or help you with any specific crushing problems you may have.



This 42"x 48" Deep Frame Crusher, in operation at Lyon Mt. mine, required a special sectionalized frame to allow parts to be lowered down shaft in an ore skip and assembled 2213 feet underground.



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BIRDSBORO

BUCHANAN JAW CRUSHERS

panel review section of NWLB Disputes Division, was designated liaison officer to answer inquiries regarding cases before the board. Regional boards also were instructed to make similar designations.

(2) Independent unions may request the appointment of a member of an affiliated union to sit on subordinate board committees when they are considering their cases.

(3) A.F.L. and C.I.O. unionists who try to make organizational capital out of a claim that independent unions do not get fair treatment from the board because they lack full representation will be subject to "prompt and appropriate" board action.

(4) Independent union representatives will be appointed, on their request, to board panels hearing independent union cases.

(5) Jurisdictional disputes involving independent and affiliated unions will be submitted to an impartial arbitrator in accordance with the board's practice

with respect to other jurisdictional disputes.

• **No Spokesmen**—That the board faces real problems in granting representation to the independents was emphasized in a letter to Thomas from NWLB Chairman William H. Davis.

Davis stated that one of the main difficulties is the fact that independent unions have no recognized spokesmen.

The Confederated Unions of America, established in 1942, is the only organization claiming to represent independents, but Davis asserted that its membership "appears to be of a very limited character."

Largest single component of the C.U.A. is the Mechanics Educational Society of America with 50,000 members. About 60 other organizations, chiefly one-plant unions, are affiliated with the C.U.A.

• **Unaffiliated Unions**—Davis listed the following major independent unions not affiliated with the C.U.A.:

United Mine Workers—600,000 members.

International Typographical Union—83,500.

Independent telephone unions—167,000.

East Coast shipyard workers—100,000.

Brewery workers—67,000.

Break for Cities

Areas with improved labor supply can get better rating quicker under new WMC plan. Other controls are revised.

The War Manpower Commission has geared its area-classification system to the quick changes in labor supply situations which are expected to characterize the reconversion period.

• **New Procedure**—Classifications of areas now will be changed on a day-to-day basis instead of every 30 days, and forecasts will be made on a two-month, instead of a six-month, basis.

The area-classification system was designed originally to provide the procurement agencies with a guide to govern the placing of war contracts. Its importance was enhanced recently, however, by actions of the War Production Board tying regulations governing the resumption of civilian production to the WMC classification system (BW—May 13 '44, p. 5).

• **More Protests**—The classification system has never been popular among cities classified in Group I (acute labor shortage) and Group II (serious labor shortage) because it kept war contracts away.

Pressure against individual classifications has increased recently. Communities realize that they may lose out in the race to get back into civilian production because of the system.

• **Slow to Change**—WMC's answer to all protests has been that its classifications have merely reflected actual labor supply facts and that they are changed as soon as the basic facts change. Actually, it frequently took 60 to 90 days to get the ratings adjusted to changes in labor supply.

Two other actions taken recently by WMC pointed to a tightening up of controls to cover the present period before reconversion.

• **Tightens List**—Regional directors of WMC were restricted to listing as "locally needed" only 15 activities on a new list. Previously, the regional directors had wide discretion in the designation of locally needed activities, but the recent selective service decision to allow draft boards to defer men in locally needed activities resulted in the WMC decision.

Otherwise, WMC feared its control over occupational deferments would be watered down, thereby nullifying efforts to persuade draft eligible men 30 and over to take essential jobs.

• **Activities Listed**—All or part of the approved list will be controlling in

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Post-War Business in Scandinavia

Danish businessman and engineer with own company in Sweden, seeks agencies and representation in all technical branches. J. N. Dalhoff, staying at Waldorf Astoria, Room 9B, New York, during month of May.

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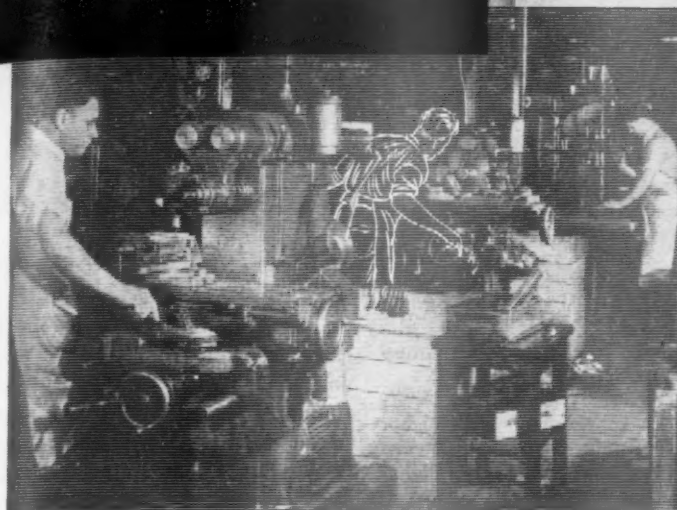
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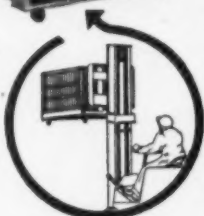
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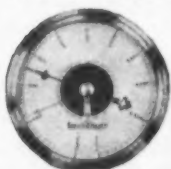


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a specific area with the approval of regional directors. Other activities may be added only with national approval.

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• **May Extend Plan**—Under another restrictive action, WMC regional directors were authorized to extend the controlled referral plan for male workers to Group III (balanced labor supply) and Group IV (labor surplus) cities. Previously, WMC applied the plan as needed in Group I and Group II cities.

The action was a recognition of the fact that a shortage of male labor might exist in a community, even though the over-all supply of labor was balanced.

Petrillo Scores

Signs first direct A. F. M. contracts with movie producers, leaving him free to devote all attention to NWLB cases.

James C. Petrillo had a novel experience last week. He made a conquest for his American Federation of Musicians without becoming embroiled with the National War Labor Board. Eight major Hollywood movie producers met his terms without a murmur.

• **Back to NWLB Cases**—Now Petrillo can devote all his attention again to NWLB cases. One involves the A.F.M. demand that stations WJJD and KSTP add extra record turners to their staffs (BW—May 6'44, p100). The other involves the year-long refusal of musicians to make records for RCA-Victor and Columbia unless they follow Decca's example and pay royalties into the union treasury.

Stretching the definition of what affects war production further than it did in the Montgomery Ward case (page 15), NWLB's ruling in the later case is scheduled to come after public hearings have been held on its panel's rejection of Petrillo's claims (BW—Mar. 18'44, p107).

• **Goes to Hollywood**—In former years, the A.F.M. has negotiated with the



UNION MONEY MAKER

A.F.L. unions are prouder than ever of their home at Portland, Ore., because it's now completely debt-free and rolling in wartime wealth. Although overshadowed by the adjoining boilermakers' "marble palace" (BW—Jan. 16'43, p73), the shabby five-story headquarters boasts an enviable financial condition. During 1943, for example, the Cooperative Labor Temple Assn., Inc., paid off the final \$13,000 on its mortgage and made a \$50,000 profit on social activities.

movie producers in collaboration with four other studio unions. But this time Petrillo went to the West Coast to handle the negotiations personally after efforts to reach an agreement in New York had failed.

The Hollywood local, known as the Musicians Mutual Protective Assn. Local 47, signed separate two-year contracts with each of the eight major studios, placing musicians under full-time contract at an annual salary of at least \$5,200.

• **Agreement on Jobs**—The studios agreed to hire musicians as follows: Metro-Goldwyn-Mayer, Warner Brothers, and Twentieth Century-Fox, 35 each; Paramount, 30; and R-K-O, Columbia, Universal, and Republic, 25 each. Quantity discounts for musicians were dropped also and a straight wage standard of \$10 an hour was adopted.

Petrillo also achieved a ban on the producers' using music on a sound film other than the one for which it was made. The contracts are retroactive to Apr. 1, Petrillo's original deadline for settlement of the issue.

• **Other Demands**—In negotiations with New York newsreel producers shortly, Petrillo is expected to demand a similar



WHEN YOU CHECK UP ON YOUR PLANT'S PAY-ROLL SAVINGS PLAN FIGURES!

These days, things change with astonishing speed. The Pay-Roll Savings Plan set-up that appeared to be an outstanding job a short time ago, may be less than satisfactory today.

How about checking up on the situation in your plant? Checking up to see if everybody is playing his, or her, part to the full measure of his, or her, ability. Checking up to see if 'multiple-salary-families' are setting correspondingly multiple-savings records.

A number of other groups may need attention. For example, workers who have come in since your plant's last concerted bond effort. Or, those who have been advanced in position and pay, but who may not have advanced their bond buying accordingly. Or even

those few who have never taken part in the plan at all. A little planned selling may step contributions up materially.

But your job isn't finished, even when you've jacked participation in your Pay-Roll Savings Plan up to the very top. You've still got a job before you—and a big one! It's the task of educating your workers to the necessity of not only buying bonds, but of holding them. Of teaching your people that a bond sold before full maturity is a bond robbed of its chance to return its full value to its owner—or to his country!

So won't you start checking . . . and teaching . . . today?

War Bonds To Have And To Hold!

**LET'S ALL BACK THE ATTACK
WITH WAR BONDS!**

*The Treasury Department acknowledges with appreciation
the publication of this message by*

BUSINESS WEEK

This is an official U. S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council

Wont you **EVER** be able to
go back to work, Daddy?



Nearly half of industrial handling casualties are hernia cases

Handling heavy objects, overloading hand trucks, improper stacking and other material handling abuses are the direct cause of more accidents and more lost man hours than any other factory operation. The cost of compensation for resulting injuries amounts to more than \$15,900,000 annually.

The cost in lost production is many times

this figure: a conservative estimate of working days lost runs in excess of 5 million per year! . . . *The proper use of power industrial trucks can go far toward eliminating this man-power waste.*

A survey by a Baker Material Handling Engineer may reveal methods for greatly improving your plant safety records and for increasing the effectiveness of workers.



BAKER INDUSTRIAL TRUCK DIVISION of The Baker-Raulang Company
2164 West 25th Street • Cleveland, Ohio
In Canada: Railway and Power Engineering Corporation, Ltd.

Baker INDUSTRIAL TRUCKS

ban on "dubbed-in" music or sound effects. However, the newsreel problem is tougher since hurried newsreel cameramen generally take public events on silent film only, then dub-in appropriate music.

MICHENER CHARGES AIRD

For the second time since he became Pacific Coast director of the United Auto Workers, Lew Michener is "on trial" before his superiors in the C.I.O. union.

Since the U.A.W. is treating the matter as a family affair, details about the charges against Michener have not been made public. A committee of four members of the international executive board (John Livingston, Leo Lamotte, George Burt, and William McCauley) is conducting a private investigation in Los Angeles.

The committee's job is to determine whether Michener has disbursed the union funds committed to his care with due caution and has performed his administrative duties adequately.

What lies behind this vague project is conjectural. Michener was one of the leading figures in the North American Aviation strike three years ago (BW-Jun.14'41,p14) when the Communists still were opposing U. S. participation in the war. Put on trial by the union after the Army seized the strike-bound plant, Michener was suspended for one year (BW-Aug.16'41,p65) on a finding that the strike was called for Communist Party line purposes.

SHEFFIELD PAY APPROVED

The National War Labor Board has written the concluding chapter to that dispute between Sheffield Steel Corp., Houston, Tex., and the C.I.O. United Steelworkers of America (BW-Mar.4'44,p110) by approving the retroactivity of wage increases directed by its regional board at Dallas.

The regional board ordered the increase to be effective as of Nov. 20, 1942, the date the dispute was certified for NWLB consideration. Sheffield Steel argued against full retroactivity on the ground that the company had no means of anticipating that it would stretch for 18 months.

Industry members of the national board termed the order a crushing blow not only to Sheffield but also to other employers for whom the Sheffield decision may be precedential. Sheffield, which employs about 1,700, estimates that the sum involved will exceed \$500,000 and that it will be obliged to issue from 7,000 to 8,000 checks to workers, many of them long separated from the company.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

MAY 27, 1944



Don't miss the significance of the long wait for the invasion. Each week that has passed without the launching of the showdown blow has emphasized Allied confidence in a quick victory—before winter weather interferes. Meanwhile, German nerves have been tightened to the snapping point.

Berlin's nervous reports of Allied ships massing in Corsican harbors are intended to smoke out information from Allied denials.

Actually, threats can be expected on all sides. They are part of the elaborately planned war of nerves against Axis Europe, designed to be intensified in crescendo with the air assault.

There is more than an interesting indication of Anglo-American-Soviet understanding in the new pact with Norway allowing troops from all three nations temporarily to occupy Norwegian territory.

It bluntly warns Hitler that not even his northern flank is safe from joint United Nations attack, and hints that a blow may be imminent.

Mounting Allied confidence is evident in other quarters.

You can definitely expect Sweden to stop ball-bearing deliveries to Germany. The blacklisting of 28 Swedish companies is too serious to ignore.

The move can be made in either of two ways:

(1) The entire Swedish output of ball bearings can be contracted for by Britain and the U. S.; or

(2) The Swedish government can formally declare ball bearings an essential war material no longer eligible for export.

Experts think the latter alternative will be adopted.

Spain, likewise, is mending its political and economic relations with the Allies.

Long-frozen American commercial obligations totaling nearly \$10,000,000 are rapidly being liquidated (BW—May 20'44, p114), and patent royalties are being thawed in a newly arranged deal (page 114).

Watch Bolivia for a clew to Washington's stiffening new attitude toward recalcitrant "good neighbors."

Continued Washington reluctance to recognize the new government in La Paz is behind the current maneuvering in relation to Bolivia's tungsten contract.

Due to expire June 30, the contract calls for the sale of tungsten to the U. S. at \$22.60 a unit.

Threat, credited to Washington, is that the price will be slashed to \$16, that penalties for ore impurities will be increased, and all purchases made subject to revocation on 24-hours' notice.

If tungsten exports cease, the Bolivian government will lose about \$3,000,000 in revenues (approximately 10% of the national budget), plus the dollar exchange accruing from tungsten exports.

Since the U. S. no longer has an urgent need for huge imports, Bolivia may be forced to take a more friendly stand.

The Allies are further along the road toward settlement of world economic problems than of political ones.

It's worth noting that all political planning so far in eastern Europe is

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK

MAY 27, 1944

being done on a unilateral basis by Russia, and that Britain and the U. S. alone signed occupation deals with Belgium and The Netherlands.

In the economic field, **look for a world monetary pact before any other major deal**, though in scope that pact may fall far short of recent expectations.

Anglo-U. S. oil talks have passed beyond the technical level. The American Administration and the British cabinet have been handed specific proposals for settlement at the diplomatic level.

An Anglo-American pact for exploitation of Middle East oil can confidently be expected. This deal will be made the basis for a world conference and a world agreement on oil.

Such an international pact should be watched because it is likely to set the model for regularized relationships between foreign companies and the governments of countries where they are extracting or prospecting for underground resources.

At the recent Conference of Prime Ministers, in London, Washington scored a not generally recognized political and economic victory.

The assembled prime ministers, representing all of the British dominions, turned down flatly the Australian-sponsored proposal for tight intra-Empire trade behind high protective tariffs.

This deprives London of one of its strongest international bargaining threats.

Direct outgrowth of the British Empire's decision to cooperate in the Washington program to encourage a freer flow of international trade is Secretary of State Cordell Hull's warning to U. S. industrialists **that they should concentrate on producing goods which demand a minimum of tariff protection.**

Asked bluntly what lines might suffer if such a policy wins congressional backing, **officials recommend careful study of the inferential suggestions included in the Tariff Commission's 1933 report.**

Plans for postwar trade are beginning to take shape.

Washington has revealed that **Johns-Manville International Corp.** and the **A. P. Green Firebrick Co.** have contracted for branch plants in Mexico, with local capital participating in the new projects.

You can expect the announcement of large Mexican orders for industrial equipment very soon. Plans under War Production Board consideration for many weeks (BW—Feb. 12'44, p108) have been approved and orders will be placed directly with U. S. manufacturers by Mexican business.

U. S. industrial exporters should not overlook the importance of two new trading assets that have recently become available.

The Marmon-Herrington Co. (Indianapolis) has sponsored the compilation and publication of a 235-page, **English-Chinese dictionary of standard automotive engineering terms** (Automobile Nomenclature, \$2).

Just off the press is a two-volume **English-Spanish technical dictionary** (the first ever attempted on more than an elementary scale) covering engineering terms in every field from aviation and automobiles to petroleum and paints (Technical Dictionary, McGraw-Hill, 2 Vol., \$30).

Lend-lease: 14%

Latest report details aid to the hemisphere. Industrial equipment exports due to drop. Reverse help increases.

Total lend-lease aid to Mar. 31, 1944, amounted to \$24,224,000,000.

This, the President told Congress this week, constituted 14% of all U. S. war expenditures since the passage of the lend-lease bill in March, 1941.

Gap Explained—Total lend-lease exports, tabulated through February, amounted to \$17,195,600,000. The gap (\$7,029,000,000) between aid and "exports"—apart from the omission of March exports—is accounted for by (1) supplies transferred but still dockside; (2) supplies transferred to allies for use in this country; (3) services rendered—more than \$3,000,000, including ship repair and servicing, factory, shipyard, and warehouse capacity built for Allies, and training facilities supplied in the U. S.; (4) \$900,000,000 of ships leased for the war—included in transfers but not counted as exports; and (5) supplies purchased abroad and transferred to other allies under lend-lease.

Munitions Chief Exports—Lend-lease munitions to fighting Allies continue to

be over 50% of lend-lease exports. Industrial materials comprise 21%, agricultural goods 13%, services 12%.

The distribution of lend-lease exports, to the end of February, has been predominantly to battle areas—present or future. The United Kingdom received 42.5%, the Soviet Union 27.6%, China, India, Australia, and New Zealand, 11.2%. Other areas received 4.3%, of which Latin America got less than 1%.

This week, Washington slammed the door on lend-lease to Turkey, convinced that Ankara intends to sit tight for the duration.

● **Aid to Latin America**—The President's 15th report to Congress contains the first detailed information on lend-lease exports to Latin America, which totaled \$135,858,000 by Mar. 1.

Munitions comprised nearly 85% of this total:

Ordnance and munitions....	\$23,260,000
Aircraft and parts.....	53,924,000
Tanks, motor vehicles.....	37,082,000
Watercraft	758,000

Total\$115,024,000

● **Two-Thirds to Brazil**—Two-thirds of these military supplies went to Brazil, to bolster hemisphere defenses. No lend-lease aid went to Argentina. No civilian goods went to Latin America under lend-lease.

In the nonmilitary category, the U. S. exported \$20,773,000 of industrial materials to Latin America, chiefly machinery for production of war-essential minerals and other raw materials.

● **Industrial Materials Up**—Although lend-lease exports of industrial materials

to all Allies—including machinery and tools, petroleum products, metals, and other items (chart below)—continue to increase, this year should witness a sharp decline as Allied war production facilities reach completion. During the first two months of 1944, the rate of industrial materials exports was slightly below that of the preceding twelve months, but nearly double the rate in 1942.

Already arrangements are being made to prevent over-expansion of industrial plant in Allied countries with a view to peacetime needs. Under an informal agreement between London and Washington, for instance, the United Kingdom is to pay cash for some equipment needed for war but easily convertible to civilian production received since Nov. 1, 1943.

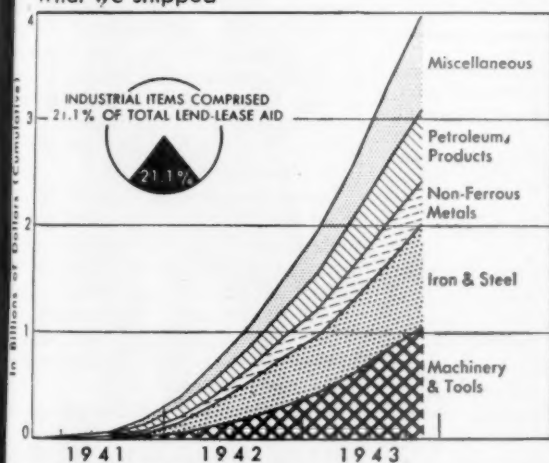
● **Consumed in Battle**—Most of the items described as industrial materials in lend-lease reports are consumed in battle. Thus, for example, the following items shipped to the Soviet Union undoubtedly wound up on the battlefield: 1,450,000 tons of steel; 420,000 tons of nonferrous metals; 200,000 tons of explosives; \$200,000,000 of machine tools; and 840,000 tons of petroleum products.

Such exports as the complete tire factory (BW—Nov. 7 '42, p. 44), and 144,000 tons of refinery equipment, however, may well have postwar usefulness.

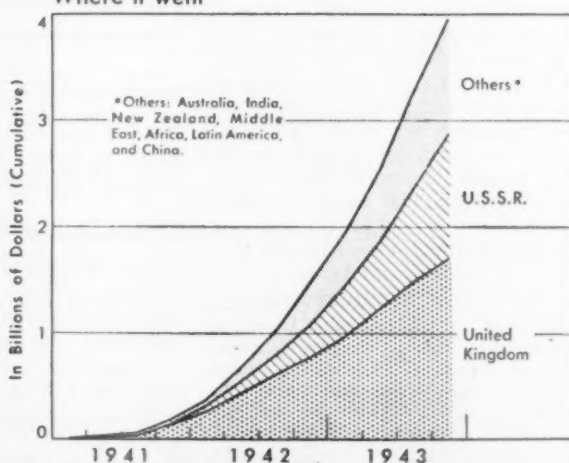
● **Mutual Aid**—Mutual aid, or reverse lend-lease, continues to increase in importance. By the end of 1943, the United Kingdom, Australia, New Zealand, and India had supplied the U. S. with \$2,000,000,000 in reverse aid. During the first months of this year, it

LEND-LEASE EXPORTS OF INDUSTRIAL MATERIALS

What we shipped



Where it went



Machinery and tools comprised an increasing share of the \$4,000,000,000 of industrial items exported under lend-lease to the end of 1943. The United Kingdom received

43% of that total; but during the first two months of 1944, according to data released this week, the United Kingdom took only 32% while the Soviet Union received 39%.

became clear that \$2,000,000,000 may be supplied in 1944.

The value of these supplies, the President's report points out, is estimated in local currencies converted at the current rate of exchange, and therefore does not reflect the sharp price differences which exist between countries. In terms of goods, valued at U. S. prices, reverse lend-lease would be at least 100% greater than the dollar figures indicate.

Back to School

Advanced study course in international affairs is to be offered in Washington by group headed by Rep. Herter.

A Washington center of advanced studies in international affairs for businessmen, government officials, and others facing special postwar problems is being planned by Rep. Christian A. Herter of Massachusetts and a group of individuals long associated with U. S. interests abroad.

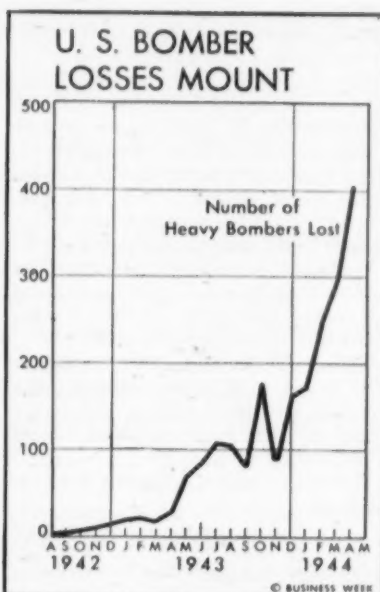
They have obtained a charter for the Foreign Service Educational Foundation and established headquarters at Suite 701, Union Trust Bldg., Washington.

• **Scholarships Are Planned**—Refresher courses of short duration as well as longer preparation for specific problems in foreign trade are contemplated. The faculty will be drawn from university, government, and business. Arrangements also will be made with established universities for special courses. No degrees will be granted, but there will be scholarships.

Sponsors of the undertaking will proceed only as funds adequate for operation over a period of at least five years are in hand or assured. They estimate that \$200,000 a year will run the program at first. Industries desiring competent personnel for foreign posts are expected to assist. The Bureau of Internal Revenue indicates that it will treat contributions as bona fide business expenses.

• **To Meet Competition**—The chief purpose of the school will be to prepare America to meet foreign competition.

The board of trustees, with Herter as chairman, represents government, business, labor, and education. Included are several businessmen now holding government jobs or otherwise associated with the war program, such as William L. Clayton, Surplus War Property administrator; Lewis W. Douglas, president, Mutual Life Insurance Co. of New York, recently deputy administrator of the War Shipping Administration; George L. Harrison, special consultant to Secretary of War, and president, New York Life Insurance Co.; Paul Nitze, director of



Between January and April of this year the number of U. S. bombers lost over Western Europe more than doubled. This month's toll promises to be back at the January level. Two years ago, at the start of the air offensive against Europe, American losses were only 10% of Britain's; during the first four months of 1944 the division was: U. S., 1,147 (chart); Britain, 1,041 (not shown). Even these announced losses, far below actual casualties (i.e., planes that make home base but will never fly again are not included), are still not a match for United States and British aircraft production totals.

Foreign Procurement & Development Branch, Foreign Economic Administration, and member Dillon, Read & Co.; Myron C. Taylor, former chairman, U. S. Steel Corp.; Charles E. Wilson, executive vice-chairman, WPB, and president, General Electric Co.

OPEN DOOR FOR BRAZIL

SAO PAULO—If current Brazilian agitation in favor of a bold immigration policy after the war materializes in legislation, the biggest population influx since the slave-trading era between 1534 and 1583 can be anticipated.

During the sixteenth century an estimated 10,000,000 slaves were shipped to Brazil, but between 1884 and 1939 only 4,159,000 immigrants entered.

Now Brazil is conscious of its need for experienced farmers and skilled or semiskilled labor to speed economic development. Contemplated changes

would increase the number of bound immigrants — under current quotas 80% of immigrants must stay for four years.

On the basis of experience, Brazil is primarily interested in Spanish, Portuguese, and Italian immigrants, already favored under present quotas.

Official plans envisage government subsidized colonies located where labor is most needed.

Dollars Return

Spanish agency starts machinery for the repayment of second half of commercial debts to U. S. businessmen.

MADRID (Cable)—Last week the Spanish Foreign Exchange Institute invited debtors to apply for foreign exchange with which to repay the second half of commercial debts to U. S. businessmen.

At the same time, Spain will also proceed to unblock remaining dollar funds due big American firms for patents and royalties. So far, no arrangement covering interest and dividends has been made.

• **End in Sight**—Under the transfer agreement negotiated by Madrid and Washington in February, 1943, Spain permits transfer of dollar exchange to repay all commercial debts under \$1,000, and 50% of larger debts.

The arrangement to extend payment to cover the final 50% may mean that most of these debts will be liquidated by the end of this year. Commercial debts partially settled under the first agreement may be liquidated under this one.

• **\$40,000,000 Accumulated**—Repayment in dollars has been made possible by U. S. purchases of strategic materials in Spain. At present Spain's dollar accumulation is estimated to run between \$30,000,000 and \$40,000,000 (BW—May 20 '44, p114).

Under the agreement signed last year Spain agreed to set aside a definite percentage of U. S. Commercial Corp. spendings for settlement of commercial debts and royalty payments. Spain agreed to set aside, retroactively, 5% of all U. S. dollars spent in Spain in 1942, and reserve 10% of all subsequent dollar expenditures.

Washington and London permit Madrid to spend the balance in the U. S. and Latin America to buy strictly limited amounts of materials necessary to maintain Spain's civilian economy.

• **Debt \$10,000,000**—Spain's commercial debt to about 1,000 U. S. creditors was around \$10,000,000. Liquidation of

We're just little people

We're not brass hats.
We're not big shots.
We're just plain folks . . . but
We're the folks who made this country!
And we're the folks who will save it!

Save it from *two* things it's *got* to be saved from now.
The first thing is the Enemy. The second's
something that doesn't look very dangerous, but is.
It's the danger of Prices Getting Out of Hand.

Here we are this year—after we've paid our taxes—with
131 billion bucks in our pockets.
But only 93 billion dollars' worth of goods to buy.
That leaves 38 *extra* billion dollars.

Sure, the easy thing to do is to take that 38 billion
and start running around buying things we don't need,
bidding against each other . . . forcing prices up and up!

Then people want higher wages. Then prices go up some more
—and again wages go up. So do prices again.

And then where are we!

But us little guys—us workers, us farmers, us businessmen
—are not going to take the easy way out.

We're not going to buy a single, solitary thing that we can
get along without.

We're not going to ask higher wages for our work,
or higher prices for the things we sell.

We'll pay our taxes willingly, without griping . . .
no matter *how much* in taxes our country needs.

We'll pay off all our debts now, and make no new ones.

We'll *never* pay a cent above ceiling prices.
And we'll buy rationed goods only by exchanging stamps.

We'll build up a savings account,
and take out adequate life insurance.

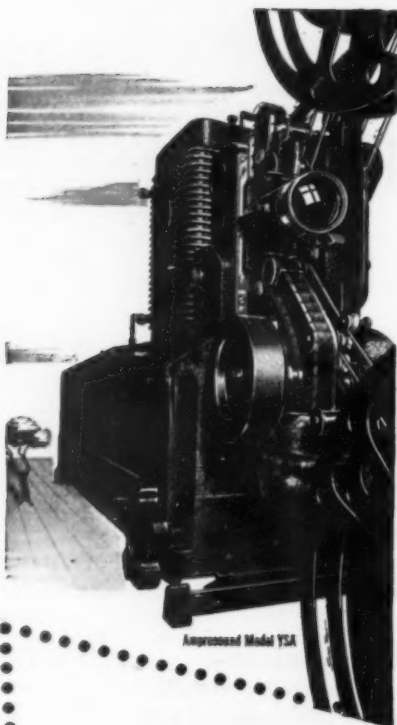
We'll buy War Bonds until it pinches the daylight
out of our pocketbooks.

Heaven knows, these sacrifices are chicken feed,
compared to the ones our sons are making.



Use it up . . . Wear it out.
Make it do . . . Or do without.





Ampro Model T2A

Books That Talk

Sound Motion Pictures in the Home

Current news, science, literature, humor, drama, opera and travelogs—all these will be a part of the post war library of the average home in the form of convenient 16 mm. sound-films! These talking books are here now and their number is being enormously increased by the war training and entertainment program. The equipment for showing brilliant, clear pictures with rich, life-like tones is also ready now, simple to operate—and surprisingly low in price. Of course, today these Ampro projectors are going 100% into the war effort. After D-Day—Ampro units will be ready to make 16 mm. sound films a reality in your home. Write today for the catalog of Ampro 8 mm. and 16 mm. silent and sound projectors.

★ Buy War Bonds

AMPRO

Precision Cine Equipment
Ampco Corporation, Chicago 18

small debts leaves only a handful of beneficiaries under the new agreement.

Spain's decision to settle patent and royalty claims, perhaps heralding an imminent resumption of interest and dividend payments to encourage U. S. post-war investments, was arrived at independently of the commercial debt agreement. The \$10,000,000 commercial settlement was engineered by the State Dept. at the behest of the National Foreign Trade Council, Inc., of New York.

Chief claimant is International Telephone & Telegraph Corp. with \$1,800,000. Under the 1943 agreement I.T. & T. received \$900,000 and may shortly receive a like amount. Other big holders, including International General Electric Co., may also expect to settle accounts outstanding since the middle thirties.

● **Exchange a Barrier**—Chief impediment to the transfer arrangement is the penalty imposed on Spanish importers.

Debts were incurred at a time when the peseta was 7.3 to the dollar. The current rate is around nine to the dollar, but the agreement of last year was

regulated at 11.22 pesetas to the dollar. Importers in Spain were asked to pay the difference. Almost all have complied despite their having calculated profits and paid taxes at the old rate. Still outstanding and unsettled debts arising out of interest payments and dividends accumulated in Spain to the credit of Americans.

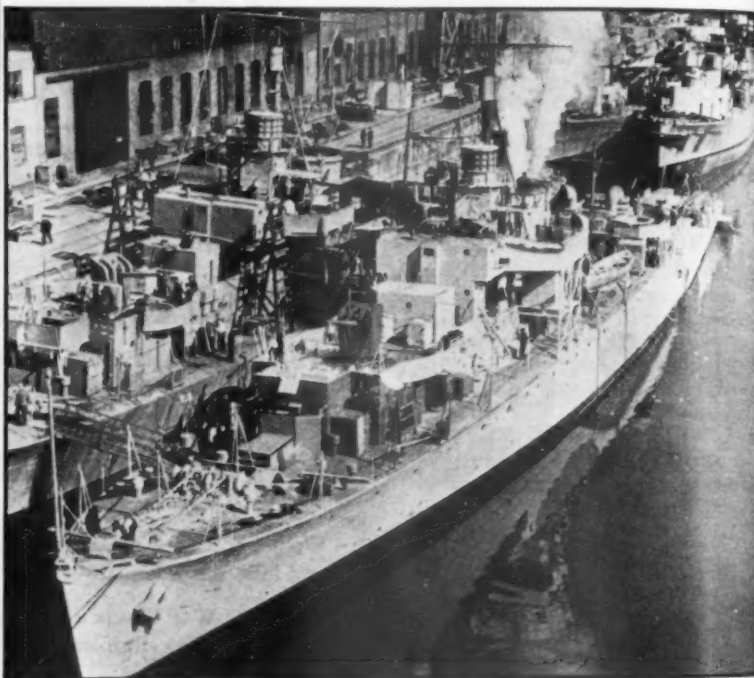
CANADA

EXPORT AIMS BACKED

OTTAWA—Canada's interest in expanding export trade after the war brought government and business leaders together last week in Hamilton for a foreign trade conference. Upshot of meeting, sponsored by the Canadian Chamber of Commerce, was reaffirmation of:

(1) Realistic, liberal, and constructive tariff and trade policies, in line with U. S.-British-Canadian "exploratory" talks (BW—Jan. 5'44,p67).

(2) Retention of Canadian



POCKET DESTROYER

Canada's latest combat ship is the pocket destroyer whose big invasion role is the protection of sea lanes between Britain and Allied landings in Europe. The new escort is of the frigate class and measures 100 ft. longer than the doughty corvette of transatlantic convoy fame. Being built at

the rate of one a week, this \$1,500,000 vessel typifies Canada's great effort to become the United Nations fourth ranking war production power. Reflecting Dominion accomplishment is the navy which has grown from prewar fleet of only 15 ships to present armada of more than 700. Personnel has grown from 1,700 men to nearly 70,000 (BW—May 20'44,p11)

ships in a substantially enlarged merchant fleet (BW-Oct.30'43,p59).

(3) Expanded trade commissioner representation abroad, with rank of legation attaches (BW-Jan.22'44,p106).

(4) Export credits, government-backed, to encourage trade (BW-Feb.19'44,p116), with special attention to manufacturers able to accept orders for heavy capital equipment.

Trade & Commerce Minister James A. MacKinnon announced creation of the Export Planning Division, a new offshoot of the Commercial Intelligence Service of Trade & Commerce Dept., to aid businessmen. Since 1939, the number of subsections in Commercial Intelligence has increased from four to eleven, and appropriations this year were increased \$300,000.

MONTREAL RATES CUT

Take-over of Montreal Light, Heat & Power Co. by the Quebec Hydro Electric Commission (BW-Apr.22'44,p117) has netted Montreal consumers a quick dividend.

The commission has announced a rate cut to domestic consumers of 19%, reducing the utility's revenue by \$950,000. Commercial consumers will pay 18% less on future bills, and charges to the city of Montreal for street lighting and other power services will be dropped 30%. Total cost to the commission of the cuts is estimated to run to \$2,210,000.

TRAVEL RULES EASED

Canadian business and tourist travel to the U. S., severely restricted since 1940 to preserve Canada's dollar exchange, will rebound following Ottawa's lifting of fund controls. Under the new ruling Canadians are entitled to \$150 a year for one trip across the border, or \$75 for each of two trips in any twelve-month period.

Washington has also acted to facilitate Canadian travel in the U. S. Canadians are now allowed to enter the U. S. for 29-day stays without a passport.

LOAN GOAL EXCEEDED

Canada's Sixth Victory Loan drive, ended last week, topped the goal by a margin of \$200,000,000 for a total of \$1,400,000,000. The last loan ran to \$1,383,000,000.

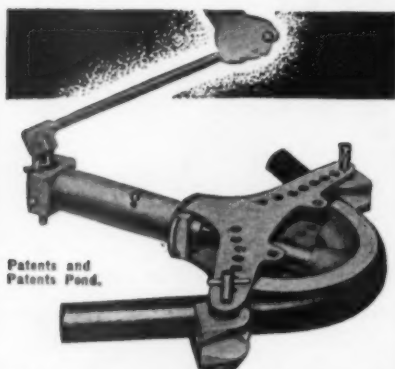
Individuals purchased 46% of the total (in the last U. S. drive individuals took 32%), and the number of participants rose nearly 9% to about 3,000,000 (in a population of 11,000,000).

Canada's armed forces took \$45,000,000 in bonds, with men overseas subscribing \$12,000,000.

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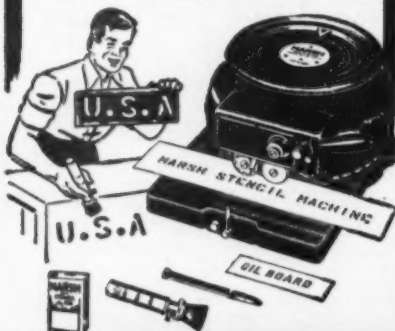
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MARSH

THE MARKETS

(FINANCE SECTION—PAGE 72)

Wall Streeters aren't throwing their hats in the air; they aren't even making predictions looking much beyond 24 hours into the future. Yet they have seen the stock market perform much worse than it has over the last few days.

● **Creeping Advance**—Even on Tuesday of this week, when active buying in the rails gave the list its best appearance in some time, the upturn failed to break out of the pattern of a creeping advance. Volume failed to churn up to anything very exciting until Wednesday when, in fact, profit-taking slowed the rise. And the speculators jumped around enough so that the casual market observer could see little approximating a concerted trend.

Of course, even the most rampant bulls are willing to admit that too much is hardly to be expected of the market in this critical period. Good news from Italy is reassuring, but neither day-to-day traders nor long-term investors are going to commit themselves too far until the invasion becomes an assured success.

● **Analysts Satisfied**—It is only in the light of these restraining circumstances—and against the still-dim backdrop of postwar pains in the demobilization of industry—that the relatively strong market of the last few days can be evaluated. On that basis, security analysts are fairly well satisfied with recent progress.

The average price of industrial securities, by midweek, was nudging the 1944 highs; the rails, meanwhile, were threatening to break through the best levels of their 1942-43-44 bull market.

Many of the rail stocks set new highs for this year, and Atlantic Coast Line climbed to its highest point since 1937. Similarly, the second-grade rail bonds were active at higher prices.

● **Liquor Shares Strong**—Strength in the liquor shares early this week brought out the usual crop of reports concerning forthcoming "drinkidends." The credulous newcomer is so readily taken in by the imaginings of the "barflies" that Seton Porter, president of National Distilling, saw fit on Wednesday to declare that his company, for one, is not even considering any sort of whisky distribution to stockholders.

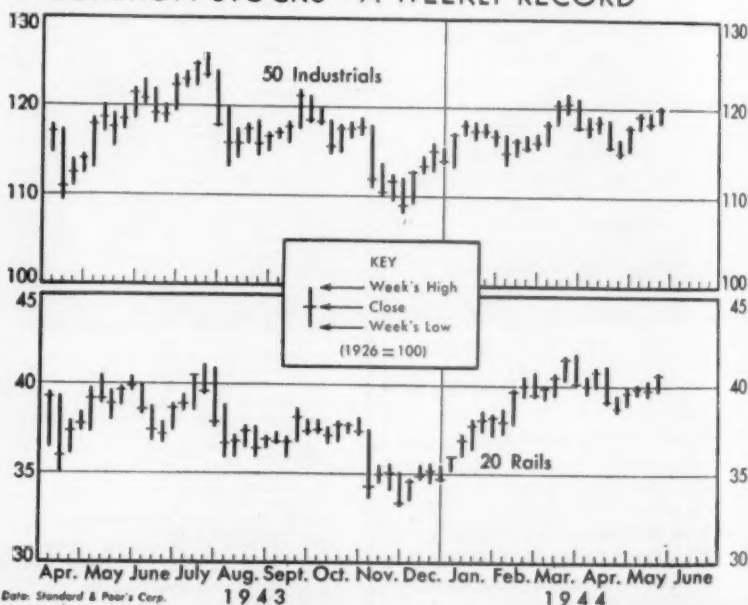
R. H. Macy common was active around the year's top at midweek in response to stockholders' approval of the new issue of 500,000 shares of 4 1/2% preferred, 165,607 shares of which are to be distributed as a dividend on the junior stock. The declaration of this dividend—one share of preferred to each ten of common—was hardly unexpected, however, as the plan had been outlined some time ago.

Security Price Averages

	This Week	Month Ago	Year Ago
Stocks			
Industrial ...	120.0	118.3	115.1
Railroad	40.7	39.8	38.8
Utility	51.2	50.8	49.9
Bonds			
Industrial ...	122.3	121.5	121.3
Railroad	107.1	106.5	105.2
Utility	115.7	116.1	116.6

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

Labor Amendment

In a recent report on the leadership of Paul Shoup, president of the Los Angeles Merchants & Manufacturers Assn., for a referendum on a state constitutional amendment to outlaw the closed shop, union shop, and maintenance of union membership (BW-Apr. 24, p. 101), it was noted that several California employers' organizations felt that this move was badly timed and that differences of opinion as to its political expediency suggested a cracking of southern California's "united front" in behalf of the open shop.

In comment on this, Mr. Shoup writes that the referendum effort was not undertaken "until comprehensive surveys through competent agencies were made in every metropolitan and some rural areas in the state" and that these showed that "nine out of ten people were favorable in principle; four out of five thought that the proposal should be enacted into law."

Discussing the move as a sequel to a similar one begun in 1940 but later let down to a successful effort to win the 1942 referendum banning unionism of "hot cargo" and secondary boycott tactics, Mr. Shoup says, "We regret that some associations with headquarters in San Francisco that joined with us in 1940 do not now wish to support like measure. However, it is not proper to include the State Chamber of Commerce among them since it never endorsed the open shop as a policy, nor has it endorsed the closed shop. Its good and useful work has been largely in other fields than labor relations. The programs of the State Chamber and those of the Merchants & Manufacturers Assn. have, at all times, been conducted independently without either being under obligation to consult with or be ruled by the views of the other. Therefore, no split between them can be assumed because of a difference of view on this subject."

"The only problem in getting signers for the petition is one of manpower—not one of division between business organizations, for four out of five voters approached sign it. And, if the 178,000 registered petitioners can be secured within the rather brief time limit, regard this as a forecast: it will be approved in November by 500,000 majority and, like the 'hot cargo' act, will be helpful to our war effort and to what follows after the boys come home."

Business Week is glad to add Mr. Shoup's comment and prediction to the

record of this move, which he is leading with his usual forthrightness.

On "Small Business"

John Frier of the Alox Mfg. Co., St. Louis, writes as follows:

I was interested in your article in Business Week issue of April 29 on small business.

I believe there is a good deal of confusion as to what people mean by the survival of small business in relation to larger business.

Many large businesses, while they continue to exist, if judged on the same basis as you would judge a small enterprise, have ceased to exist because they are not profitable.

Many large businesses, as for example, some of the railroads, street railway systems, etc., go through periodic reorganizations, when a small business would cease to exist. However, they are supplied with new capital, and continue on until the capital is used up. Then the same process is repeated.

I do not know what proportion of stocks listed on the New York stock exchange—and I assume by this very listing, considered as big business—are actually paying any dividends. To this extent, as far at least as their stockholders are concerned, they might just as well be out of business, although there remains the hope that conditions may change.

Small business, and by that I mean real small business, has not in the past been given a fair break against larger business on many items that go into their cost. For example, in practically all instances that I know of, they pay a much higher rate per hour for their power. In this small business last month we used 6,680 kw. hours, and the bill amounted to \$171.20, or just a little bit less than 3 cents per kw. hour. This is over twice the rate per kw. hour paid by a neighbor of ours, who draws power from the identical line and whose leads are taken off not over 25 feet away from ours.

Then in the matter of insurance, both fire and liability insurance, the rate charged the small man as against the larger firm, especially where they have multiple locations, is considerably higher.

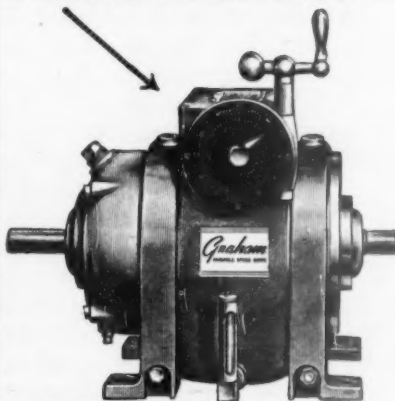
Now if you will actually give the small business the same costs on a number of these items that you do the so-called large businesses, by and large the efficient small businessman can more than hold his own against the larger businesses, and will neither need nor ask any special favors.

Correction

Last week in this space I referred to a book on Employee Counselling by Helen Baker of the Industrial Relations Section of Princeton University. I regret that Miss Baker's name was incorrectly spelled. Lapses of this sort usually are blamed on the printer, but this time I fear the author must take the rap. Sorry!

W.C.

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THE TREND

CAN THE HOME FRONT TAKE IT?

One of the curious but inevitable concomitants of invasion will be the sharpest pinch on soft goods that we have experienced during the war. Business Week pointed out almost a year ago (BW—Jun. 26 '43, p. 116) that the liberation of Europe would thrust upon us new responsibilities for supplying food, textiles, fuels, and similar non-durable goods precisely when other war needs for all these things were at their peak, and production of them at its low point. This clash of demands will have important economic and, perhaps, political implications for some time to come.

• The recent history of soft goods is recorded in the chart on page 17. Over-all industrial output of these goods just about hit its peak in mid-1941, and has remained stable since then. In some lines production has gone up a bit, and in some it has declined; but, in general, it is at the limit of natural, mechanical, or manpower capacity. The trend from now on is down.

Meanwhile, the demand placed on such production by the armed forces, lend-lease, and foreign relief has steadily mounted. So civilian supplies of soft goods have fallen about 25% in three years—more sharply than that in such cases as those of gasoline, textiles, and paper, less sharply in those of manufactured foods, tobacco products, and coal.

Parenthetically it might be noted that the charted index of soft goods supplies is but a rough indicator in that it measures only direct industrial output, rather than the whole range of agricultural, industrial, and distribution activity going into the supplying of civilian and war needs for consumption goods. However, while such a complete measure might show slightly different results to those the chart on page 17 reveals, the general pattern would inevitably be much the same.

What the pinch on each type of soft goods will be over the coming months can hardly be detailed, since so many unpredictables are involved. Yet some factors can be foreseen.

For example, any cut in military use of gasoline consequent upon the defeat of Germany is apt to be a bit sharper than any rise in relief consumption; coal is too bulky for much to be shipped overseas in any event; but food and textiles will still be wanted for military use, on top of new relief demands.

• In general, the trend of soft goods for civilians is down not only because war demands for most of them are apt to expand for some time, but also because of the restraints on production. Thus, the Washington forecast of a 12% drop in civilian meat supplies from the first to the second half of 1944 is based on the probable fall in slaughtering

as the livestock population is readjusted to our limited feed supplies. In textile, coal, tobacco, paper, and some other industries, output is being pared by the decline in available labor, and that trend will hold well after any cut that may be made in military manpower or munitions production when Germany falls. Even in such lines as rayon and petroleum, where activity is restricted by mechanical or natural capacity rather than by shortages of workers, the production totals can, at most, increase only slightly.

• Economically, the tightness in soft goods will tend to protract the upward pressure on the cost of living—and on wages. OPA ceilings will have to be kept on the job if prices are to stay below the level that supply and demand would freely determine. Distribution of scarce goods will have to be carefully controlled. In addition, there will be a call to put greater effort behind the output of soft goods, which means getting more manpower for labor-short industries and obtaining additional equipment for the hard-pressed plants.

How much and how long we can rely on controls over scarcity as against attempts to end the scarcity will depend a good deal on public reaction to the tightening in consumption goods. The home front may be willing to do without for the duration of military operations in Europe. But what about the time when victory there will have been attained—when the pressure to sacrifice subsides but the need to do so intensifies?

• It is entirely possible that civilians will not, for long after invasion, "take" the cuts in consumption goods which invasion now seems likely to involve. And, because of that possibility, we may have to choose among unfortunate alternatives. If we start to press soft goods output strongly now, it may be at the expense of war production. If we cut the relief shipments we planned, it may be at the expense of our political future in Europe. If we do neither, it may be at the expense of stable prices later, when administrative controls may not hold up in the face of reduced supplies.

Demand for the hard goods of munitions is often said to be months ahead of the battlefronts; so may demand for soft goods run months behind the course of the war. Looking ahead, we can see that the soft goods squeeze will intensify for some months after victory in Europe and that it may last for the duration of the war with Japan. On how we meet that squeeze—individually and collectively—may heavily depend the winning of the peace, at home and abroad.

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